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Online Professional Development of English Teachers: An analysis of Cognitive Presence via the Community of Inquiry Framework

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Online Professional Development of English Teachers: An analysis of Cognitive
Presence via the Community of Inquiry Framework

Adam Edmett

A thesis submitted for the degree of Doctor Of Education

University of Bath

Department of Education

December 2017

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Chapter One Introduction

1.1 Abstract

This study explores the educational benefits of online dialogue as posited by the Garrison et al. (2001) Community of Inquiry framework. Specifically, that online discussion allows learners to collaboratively construct knowledge through critical discourse (i.e. 'cognitive presence'), that results in deep and meaningful learning. A body of Community of Inquiry research has led to a critique of the framework, specifically that the higher levels of reflective thought are not occurring. This thesis investigates this potential flaw and the response that the problem is not the framework per se, but issues with 'teaching presence' or online course design and facilitation. To investigate these research questions, two groups of in-service English language teachers studied identical course content with differing discussion forum task types. Group A tasks included debate and case study based tasks while Group B used more typical open discussion type tasks. The resulting transcripts were coded as per the analytical framework of Park (2009). Overall, Group A transcripts showed increased incidence of the higher phases of 'cognitive presence' when compared with Group B. There was evidence, particularly in the debate format, that changing the task design impacts the shape and substance of the discussion, providing more opportunity for deeper critical thought. Still, 'lower level' exploratory thought was dominant e.g. the teachers engaged in 'Personal narration' (i.e. stories about learners or classroom practice) for 47.1% of the total cognitive presence incidence in Group B and 17.5% in Group A. This was not proportionate to the number of prompts requesting the teachers to engage in this. Given the frequency with which the latter occurred, future research is required to understand if this is a recurrent and distinctive feature of in-service teachers online discussion and to better understand the function and value of these 'stories'.

1.2 Personal statement

As an English language teacher, my initial training was heavily influenced by Communicative Language Teaching theory (see Littlewood, 1981) where decreasing 'Teacher Talking Time' (TTT) and increasing authentic student communication was a reaction to perceived failures in language learning approaches such as grammar translation (see Richards & Rodgers, 2001) and audiolingualism (see Harmer, 2001). This 'new' ideology felt intuitively right as it seemed to rectify all that was wrong with my previous language learning experiences at school. We could label this Epiphany One.

As I moved into the field of online learning in 1999/2000 this belief system fitted in well with the idea that online learning no longer required a teacher that performed the 'sage on the stage' role. Instead, the teacher was to be a 'guide on the side'. The relationship between learners and teachers was undergoing a fundamental change in dynamic. Online communities of learners/teachers were co-constructing knowledge and new meaning in communicative exchanges that were theoretically unlimited in terms of time, place and space. I experienced this heady mix of optimism for the first time with an initial module of a Masters in Online and

Distance Education offered through the now defunct UK e-University. We could label this Epiphany Two. I was convinced that online education was set to revolutionize all learning.

Predictably, Epiphany One and Two and the beliefs associated with them have been significantly modified since they were first formed. Epiphany One was challenged the moment I stepped into a classroom and realised that 'solving' language learning, would not just be a matter of implementing a more up to date theory and approach. I could see the problems with the past methods, but I could also see problems with the new. For Epiphany Two, it quickly became very clear that online education was not about to change learning for the vast majority of learners for a whole range of reasons e.g. barriers such as access to infrastructure, lack of IT skills, costs, time, and motivation etc. Moreover, while I have seen positive results, I have also seen examples where online learning has had a tangible negative impact for participants. Specifically, the area of concern is one that has challenged my belief system regarding the benefits for learners of communicative exchange and dialogue when learning online. This thesis looks to explore this problem.

1.3 Statement of the problem

The Community of Inquiry framework is widely used for both research into online education and the design of online learning. The validity of the model has been called into question by a significant body of research which has found that higher levels of 'cognitive presence' are not being reached through dialogue and collaboration in asynchronous discussion forums. If this is the case then it challenges the entire basis for the Community of Inquiry framework and its utility as focus for research. It would also require that I modify or completely change one of my earlier beliefs about the transformative potential of online learning via collaborative reflection in asynchronous forums.

1.4 Purpose of the study

The purpose of this study is to explore the levels of cognitive presence evidenced when using an 'optimum' forum task when compared to an institutional 'standard' design (see Chapter 4.5). Advocates of the Community of Inquiry framework claim that teaching presence (specifically in this case, task design) can be positively influenced to achieve higher levels of critical thinking and this study investigates that assertion.

1.5 Significance of the study

At a micro level, this study brings into question accepted design principles for my practice in online language teacher education. More widely, it will contribute to the literature on the efficacy of online dialogue and collaboration and specifically the discussion around the validity of the Community of Inquiry framework used in differing contexts (i.e. in this context, in-service English language teachers).

1.6 Scope of the study

This study will focus on interaction and evidence of more reflective, critical thinking in purely online environments with no aim to generalise further to a blended or face to face context. It is focussed on 'Community of Inquiry' in the narrow sense of the framework developed by Garrison et al. (2001), and not its application in Education more widely.

1.7 Research questions

Do learners studying a wholly online course engage in the higher order thinking within and through discussion that the Community of Inquiry model posits?

Do specifically designed online learning activities with particular types of facilitation and direction (teaching presence) move participants more effectively through the stages of the Practical Inquiry Model?

1.8 Overview

This thesis contains seven chapters. Chapter one, this chapter, provides a brief outline of the focus of the thesis, the researcher's biography and how this created an interest in the area to be studied. It also includes a statement of the problem and why it needs investigating. Chapter two is the literature review for this thesis and covers a number of areas. Firstly, it sets online learning in the context of distance education more generally. It examines the relevant learning theory for online learning (primarily socio-constructivism) and describes the Community of Inquiry framework with its three integral 'presences'. Lastly, it explores the literature that both supports and critiques the framework. It concludes with a review of how certain studies have experimented with differing teaching presence (specifically task design) to increase cognitive presence in asynchronous discussion forums (e.g. case study, debate etc.). Chapter three describes the context for the thesis. Chapter four details the methodology, including sampling method, the design of the study, the analytical framework deployed and approach taken for data analysis. It also refers to relevant Community of Inquiry literature on methodology and highlights certain issues with coding in content analysis. Chapter five presents the findings with initial analysis in relation to the research questions. Chapter six then takes this analysis further by returning to the research questions in more detail and drawing out other themes that the analysis has surfaced. Chapter seven provides a summary of the main points that arose in Chapters five and six. It also comments on the limitations of this study and identifies future areas of enquiry that have emerged as a result of this research.

Chapter Two Literature Review

2.1 Introduction

The purpose of this chapter is to review salient literature related to distance/online education, the learning theory that has been drawn on for this mode of delivery, the Community of Inquiry framework, the problematic cognitive presence, and the responses to this through teaching presence design.

2.2 Distance and online education

Firstly, It is useful to locate online education in a definition of distance education more generally. Tolu & Shuford Evans (2013) note the elasticity of the term 'distance education' but see four recurrent themes that are included in definitions: place, in terms of distance between teacher to learner and the freedom of learning 'anywhere'; time, be it synchronous or asynchronous; a range of learning paths to achieve objectives; and potential for students to self-pace to some extent. All of these point to a sense of openness and increased flexibility, and arguably, online technologies and communication have extended and enhanced most of these elements exponentially.

From a historical perspective, Tolu & Shuford Evans (2013:47) see the literature as dividing the evolution of distance education into either five delivery modes (i.e. Anglin & Morrison, 2002 "correspondence, radio, television, two-way audio video, and web based") three generations (Garrison, 1985, 1993; Moore & Kearsley, 1995) four generations (Garrison & Anderson, 2003; Wang and Sun, 2001) or five generations (Taylor, 2001). There is some disagreement between the distinctions, for example Garrison & Anderson (2003) reject Taylor's (2001) description that sees asynchronous as a 3rd generation and asynchronous as belonging to a distinct 4th, arguing that both of these technologies continue to develop alongside each other (see 2.22 for comments on the continued primacy of asynchronous forums in formal education systems). Tolu & Shuford Evans (2013) stress that each new generation is not a clean cut with the past and that systems from previous generations are not immediately altered in line with the newly available technologies. Garrison & Anderson (2003) see the changing potential and therefore patterns for interaction as the single most important historical thread and this is the defining aspect of each historical generation. Moore (1990) was the first to foreground interaction in an analysis of distance education citing 'three types of interaction' : learner to learner interaction; learner to tutor interaction; learner to content interaction. Similarly, Tolu & Shuford Evans (2013) see two fundamental aspects of distance education being improved with each new generation : 'subject matter presentation' and 'student-instructor interaction'. Though, arguably, with the latest generational change the capacity for interaction has not just improved, but fundamentally altered the dynamic.

2.2.1 Online versus face to face (f2f)

Online learning (as previously with distance education) has had issues of legitimacy and can be perceived as an impoverished educational experience when compared with 'face to face' forms of learning i.e. those traditionally found in a physical classroom and not mediated by technology. The choice to study online is not necessarily (or even typically) a learning preference for the medium and its unique affordances. The decision can be influenced by a number of limitations that a learner is faced with, for example those of time, physical location and cost. Despite the inherent difficulties in any comparison of face to face classroom based learning with online learning there has been much research in this area. The most cited is that of Russell (2001) which compared 355 studies over a period of 70 years (1928 to 1998) and found that in 90% of cases analysed there was no significant difference in student achievement. His assertion was that no matter what media (or as Tolu & Shuford Evans, 2013 refer to it, 'subject matter presentation') was deployed, distance education was as effective as face to face education.

The long standing attempt to compare the efficacy with distance/online and face to face is perhaps brought into question by the increasing degree with which the two modes are now mixed, the common term for which is 'blended learning'. Blended learning in a promotional sense, may be branded ambiguously as 'the best of both worlds' with no explicit reference to what exactly the best elements of those worlds are. From a socio-constructivist perspective it's benefits derive from the increase in potential communication/collaboration channels (Garrison, 2013) and therefore the improved quality of knowledge construction that can occur (see Chapter 2.3 below). However, for the narrowly defined purposes of this thesis, we will be examining online learning in its purest form, that is where there is nil face to face interaction and all communication is mediated via technology.

2.2.2 Online education and learning theory

Today, 'online learning' takes many forms. It encompasses learning that is both informal and formal, collaborative and non-collaborative, open ended and time bound, co-located or geographically dispersed, with massive or small group enrolments, media rich or simply text based, delivered via open source or proprietary platforms, designed by teams or written by individuals, for an academic or corporate audience and free to end user or monetized to a cost of tens of thousands GBP. The learning theory and pedagogy that informs its design and use, where present, is also varied and its deployment justified for many reasons such as efficacy, limits of context and cost and technological affordances.

Warshauer (1996), amongst others, has noted the influence of learning theory on the way that technology is used in education. This is not deterministic i.e. web 2.0 technologies and network based communication did not develop as a direct result of educational theory, rather that the use of affordances that a technology provides is molded by prevailing thought on how people learn. For example, the early use of computers in language learning (Computer Aided Language Learning or CALL) was influenced by the predominant learning theories of that time. In terms of language teaching, this was behaviourism in the 1960s moving to a communicative approach to

teaching in the 1970s and 1980s. So in early use of CALL we find software with drills that require a user to repeat an utterance or self study quizzes with a single correct answer that a learner needs to input before moving on to the next question i.e. behaviourist/cognitivist. Warshawer (1996) also makes the distinction between 'computer as tutor' where the computer is the 'knower of the right answer' and 'computer as tool' where the computer simply enables the learner to perform a task through a particular piece of software. Similarly, Edgar (1995:1) sees parallels between the development of learning theory and the evolution of personal computer technology. Before the latter we had the "centralized and autocratic" mainframes whose main purpose was content distribution and designed around "behavioural objectives". The advent of personal computing allowed for constructivist approaches as individual students were now able to experiment with the computer as a tool in 'open-ended environments'. Lastly, Edgar (1995:1) sees the learning theory of Vygotsky coming into play as the internet (e.g. Web 2.0 type two way interaction) is able to foreground the social and allows educators to "design educational projects involving a distributed but intercommunicating audience."

Tolu & Shuford Evans (2013) also trace learning theory and its relationship with distance education, noting the first generation with its 'didactic voice' and behaviourist and positivist approach. Knowledge was objectified and the goal of distance education was to transfer this knowledge from the knower to the learner. The later part of the second generation with telecommunication technologies such as radio and television was influenced by cognitive learning theory, while the third generation with computer based communication was influenced by constructivist learning theories. Dron & Anderson (2014) take a slightly different view with three generations of learning theory identified: the first being behaviourist/cognitivist: i.e. pedagogies of instruction; the second being social constructivist i.e. pedagogies of construction and the third being connectivist i.e. pedagogies of connection (see Siemens, 2005 and 'Connectivism').

The specific type of online learning that is the focus here is that which is founded predominantly on theories of socio-constructivism (see Chapter 2.3) and which was made technologically feasible by computer based networked communication and the potential for a new form of online interaction between learners/teachers. Online collaborative activities are a fundamental pedagogical practice of this learning paradigm (Dirkx & Smith, 2004) and enacted in online discussion forums which Harasim (2000:51) describes as 'the "heart and soul" of online education'. While technology has progressed rapidly since and now offers opportunities for a range of online interaction including synchronous video communication, it is still asynchronous forums that are the primary focal point for online collaboration in formal online education. This very particular form of educational interaction i.e. text based discussion within a defined community, but potentially accessible irrespective of an individual's position in space or time, does not have a historical precedent. The permanent nature of these discussions, particularly when compared with oral discussion, is also a key characteristic. This quality has its own range of impact on the learning process, and has also encouraged a significant body of research as the process leaves digital records for later exploration and analysis.

2.2.3 Online education and socio-constructivism

The learning theory of constructivism is dominant in 'academic' online learning design (Weller, 2002). The term academic is used here to denote the type of learning that is more likely to be found in, for example, higher education (HE) or other formal education institutions, as opposed to 'corporate' online learning design which is more likely to be used by an organisation to train and develop staff (this, of course, is a generalisation and there will be many exceptions to this distinction). The Learning Management System (LMS) technologies that are associated with these two types of online learning may offer (or foreground) different functionality. For example, an LMS whose use evolved in primarily a HE context (e.g. Blackboard and Moodle) would generally include extensive capacity to collaborate and interact with peers and tutors and a grading system that mirrors that of HE, whereas a corporate LMS (e.g. TalentLMS) may focus more on delivery of 'just-in-time' content that is accessed by an individual with a simple and quick self-certification system.

Garrison (2013) notes that constructivism (also cognitive constructivism) has 'multiple roots' but it is generally considered that the theoretical basis came from the work of Piaget (1977) and is consistent with and operationalised through the work of Dewey (1933). The origins of socio-constructivism (also social constructivism) are widely held to be Vygotskian, though as Daniels (2008) notes there are as many interpretations of Vygotsky's rich and complex ideas as there are writers on Vygotsky. Both constructivism and social constructivism are based on the observation that human understanding, knowledge and meaning is constructed through experience. Constructivism and socio-constructivism may be differentiated by the degree of importance the latter places on social interaction and culture when participants in a learning community co-construct knowledge. Garrison (2013) notes however that while Piaget (1977) began with a focus on the individual he later accepted the role of social interaction in the resolution of cognitive conflict.

Weller (2002) when describing online pedagogies sees constructivism as an overarching theory from which many specific pedagogy derive, such as situated learning (see section 2.3.1 below and Communities of Practice in the work of Lave & Wenger, 1991) and collaborative learning. Garrison & Anderson (2003:12) initially referred to 'collaborative constructivism'. However, its' description as 'the recognition of the inseparable relationship between personal meaning making and the social influence in shaping the educational transaction' is not clearly distinguished from a broad definition of socio-constructivism per se. Jezegou (2010) later critiqued the Community of Inquiry framework for a lack of theoretical clarity, and a response from Garrison (2013) attempts to provide more detail for what is now termed a 'collaborative constructivist community of inquiry' (see Chapter 2.4).

The application of socio-constructivism to online learning is not unproblematic. In fact, Weller (2002:66) argues that some of the core principles of constructivism ('a very fashionable approach') are potential drawbacks, such as foregrounding facilitation rather than input to the extent where tutors feel they can withdraw and leave the students to it. This lack of input from an educator could lead to erroneous beliefs formed in the area of focus (some disciplines are

more likely to have a 'right' and 'wrong' answer e.g. a 'hard' science). For example, Angeli, Valanides, & Bonk (2003) when examining the quality of online group discussion with low tutor input found that only 7% of replies could be classified as justified opinions or claims. Furthermore, a tutor taking the 'guide on the side' role could provoke a negative student perception due to a lack of definitive or 'straight' answers from the educator. Linked to this, learners may be frustrated by the time required to construct meaning when compared to didactic instructional approaches. Lastly, Capdeferro & Romero (2012) pose the question 'Are online learners frustrated with collaborative learning experiences?' and describe the problems that learners can face when attempting to complete group work online. The writers make the distinction between lower forms of interaction e.g. information exchange, which participants are more likely to find satisfaction in, when compared with more complicated forms of group work which require joint effort towards an end product of some form. Here, learners may experience difficulties around team working, differing levels of motivation within a group or technical barriers around communication and collaboration. While group work will also raise difficulties in a face to face context, arguably some of the problems are intensified when the group is not physically located in the same space.

For the purpose of this thesis the term socio-constructivism will be used to encompass all learning that, in the main, requires some form of interaction and collaboration between any number of participants in an online community. It is cognisant of the fact that online courses will deploy a range of pedagogies and approaches that may not always fit precisely within a pure description of socio-constructivism, or that learners may not behave as per the intended design. For example, a collaborative problem based learning approach could be subverted if an individual declines the opportunity to collaborate with peers and decides to complete the task as an individual.

2.3 Community of Inquiry framework

A number of models and frameworks have been developed that have provided both a lens for research and a guide in the design of online learning. The best-researched of these to date is the Community of Inquiry framework that sees interaction and collaboration within a community as pivotal to the learning process, where deep and meaningful learning is the anticipated outcome. The learning theory that the Community of Inquiry framework is rooted in is constructivism and Garrison (2013) stresses that progression to higher order thinking skills, such as problem solving and critical thinking are both integral to constructivism and the Community of Inquiry framework. It is important to note that in the Community of Inquiry literature there is reference to both a Community of Inquiry 'framework' and a Community of Inquiry 'model' (i.e. they are used more or less interchangeably by both the original authors and subsequent writers). For this thesis we will refer to framework. The interpretation being that the latter has a less prescriptive purpose than a model and that it is used to outline/describe relevant concepts and their inter-relation. However, reference to other authors will retain the use of model where they have preferred this term.

The Community of Inquiry framework has its own dedicated website and its purpose is described as follows:-

“This interactive web-site is designed to collect published research about the Col and discuss these publications with interested researchers and practitioners. We hope to create a community of inquiry about the Community of Inquiry framework!”

Source: <https://Col.athabasca.ca/> (accessed 13.2.2017)

Where a Community of Inquiry (Col) requires collaboration and sustained communication the goal of creating a form of meta-Col has not been achieved to date. The website functionality includes a ‘Recent Activity’ block which shows the most recent posting by Dr. Randy Garrison as May 2014. The website links to social media but as of 13th February 2017 there were just 306 followers on Twitter and the official Community of Inquiry account has only 10 tweets. The website also has a list of members (190 as of 13.2.17), an orientation video guide to the website, a list of regularly updated publications, and a page with details on how to contact or join the online community. As the homepage of the website informs, “The Community of Inquiry (Col) framework theory, methodology and instruments were developed during a Canadian Social Sciences and Humanities research funded project entitled “A Study of the Characteristics and Qualities of Text-Based Computer Conferencing for Educational Purposes” project which ran from 1997 to 2001”. The Community of Inquiry seminal paper that resulted, “Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education” was the work of Randy Garrison, Terry Anderson and Walter Archer.

In Anglophone online education research, the Community of Inquiry framework is the most often deployed framework. For example, the seminal Community of Inquiry paper, Garrison et al. (2000) stands at 3703 citations (Google scholar on 14.02.17), while the key Community of Inquiry publication *E-learning in the 21st century: A framework for research and practice* stands at 3265. However, Jezegou (2010) notes that in France the Community of Inquiry framework is largely unknown, and that french speaking countries are unfamiliar with a key aspect of its philosophical basis : pragmatism (specifically Garrison et al., 2000 refer mainly to the work of Dewey and later Lipman). Jezegou (2010) suggests the result is that Francophone researchers have difficulty in ‘appropriating themselves’ with the framework and validating it or its’ constituent parts through systematic enquiry. A wider critique from Jezegou (2010) is that the theoretical basis of the Community of Inquiry framework is under-theorised and certain concepts (e.g. community, collaboration, constructivism etc.) are not fully explained or developed. Garrison (2013) responds to this critique in the chapter “Theoretical Foundations and Epistemological Insights of the Community of Inquiry”. The next section looks at these foundations.

2.3.1 Community of Inquiry : Theoretical basis and structure of framework

Lipman (2003) notes that the term Community of Inquiry was originally used by C.S. Peirce, specifically in reference to a community of scientists, and that Dewey later expanded the concept more widely to educational contexts. Garrison et al. (2001) took up Dewey and

Lipman's work to explore the rapidly evolving world of network based communication in an educational context. For the purposes of this enquiry the focus will be on the Community of Inquiry framework as initially deployed and developed by Garrison et al. (2001) in an online context, rather than the work of Dewey and C.S. Peirce, notwithstanding the influence the early pragmatist philosophers will have had on the Garrison et al. (2001) Community of Inquiry framework. The term community is much used since the advent of ubiquitous internet technology. Rheingold (1993) was one of the first to write about the potential of virtual communities to transform our lives on a personal, inter-personal and political level. Community could exist where it had been impossible previously, though even an early enthusiast like Rheingold (1993:1) warned us not to 'think that just writing words on a screen is the same thing as real community'. Jezegou (2011) provides a detailed description of what constitutes a community as opposed to for example, a group of friends (less formal) or more formal groups. A community collaborates, rather than co-operates, has a common goal in view and its' members enjoy equal standing. Garrison (2013:2) sees community as defined by context and therefore in an educational setting that means it must be 'influenced by societal knowledge and expectations' and have 'a purposeful and formal focus to learning' with 'pedagogic leadership'.

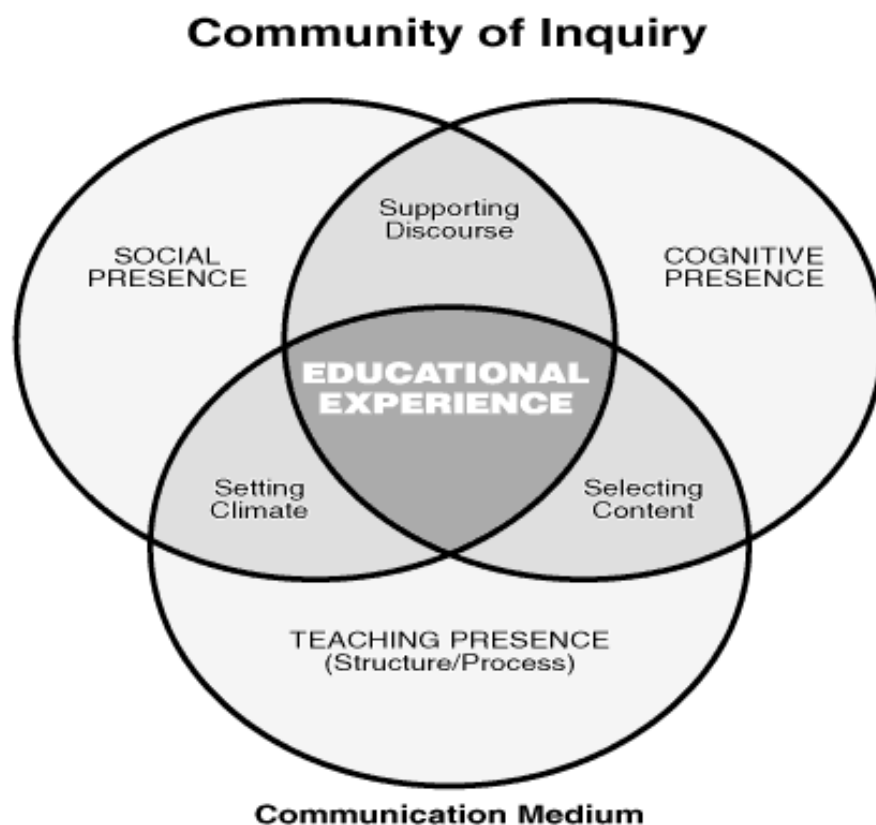
'Community' can be placed in the context of theory that sees learning as inseparable from social practice. Berger & Luckmann (1966) saw all understanding of reality as derived from social interaction. This construction of reality is also maintained by various social processes. More recently, Lave & Wenger's (1991) concept of Community of Practice moves beyond a purer Vygotskian perspective (while they accept the importance of the social in Vygotsky they challenge the centrality of internalisation in some of his work). For Lave & Wenger (1991) knowledge is situated within the interaction that a community engages in. Meaning is both contested and negotiated via participation in a Community of Practice. By virtue of the 'C', Community of Practice (CoP) and Community of Inquiry (Col) appear closely related but there are important differences. For example, while the latter is generally applied to the process of learning in a formal educational system, CoPs (as originally conceived by Lave and Wenger) are informal and totally pervasive (e.g. an individual may belong to several work orientated, educational, leisure based CoPs etc. at any one time). CoP theory focuses on 'legitimate peripheral participation' as newcomers adopt the established social practices of the community via 'experts'. Conversely a Col aims for 'shared teaching presence' (see 2.35 below) and assumes equal standing as per Jezegou's definition of community (though as above, Garrison does admit pedagogic leadership). Forefront in CoP theory is members' evolving identities (a continual process of 'becoming') whereas Col only considers identity from the perspective of ability to convey it via a construct called 'social presence'. Still, outside of differing theoretical stance, there are areas where the 'communities' studied in this thesis could be characterised as CoPs. Wenger (2013:2) writes of community members:-

"they develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems.... they have developed a set of stories and cases that have become a shared repertoire for their practice."

Wenger (2013) also notes that one of the first application of CoPs in Education was in teacher training and that CoP theory has the potential to transform the very nature of schools (unlike in business where a CoP is a means to an end, the CoP in Education is 'the end'). However, the application of CoP theory to formal educational settings is not unproblematic. For example Lea & Nicoll (2002:10) note that Lave was concerned that CoP theory was being incorrectly deployed in top down formal educational interventions as a form of 'best pedagogy'.

Thinking around the Community of Inquiry framework has evolved considerably over the last two decades as the original designers and others have responded to critique and developed the framework in response to new research; 'explicating and validating such a comprehensive framework is an ongoing challenge', Garrison (2013:2). However, the underlying structure of the framework remains the same as in its first iteration. That is, there are three 'presences' that are required for a meaningful educational experience; cognitive presence, teaching presence and social presence. The presences combine and interact as per figure 2.1 below.

Figure 2.1 : Community of Inquiry framework (Garrison et al., 2007)



Social presence was initially defined by Garrison, Anderson and Archer (2000:94) as 'the ability of participants in a community of inquiry to project themselves socially and emotionally, as 'real' people (i.e. their full personality), through the medium of communication being used.'. However Garrison (2009:352) later expanded this to account for a more complex concept that makes

explicit the centrality of educational community i.e. “the ability of participants to identify with the community (eg, course of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities.” Teaching presence was defined by Anderson et al. (2001) as ‘the design, facilitation and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes’. Lastly, cognitive presence, the area of specific focus for this enquiry, is described as “the extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained communication” (Garrison et al., 2001:89). Each presence has an associated set of indicators which have been used repeatedly over the last two decades of research to discern various levels of presence (see Garrison et al., 2001 and figures 4.1 and 4.2 in Chapter 4).

To conclude, Garrison (2013:4) provide us with a more recent summary of the framework’s three presences and the overall aim of a Community of Inquiry.

“A community of inquiry is an environment where participants collaboratively construct knowledge through sustained dialogue which makes possible personal meaning making through opportunities to negotiate understanding (cognitive presence). Leadership is essential to precipitate and purposely focus collaborative inquiry (teaching presence) if educational goals are to be achieved. The emotional and interpersonal dimension (social presence) provides the environment where learning can productively be created and sustained. The focus in a Col is on the individual constructing meaning and collaboratively confirming understanding through critical thinking and discourse. The higher goals are to realize mutual understanding and contribute to societal knowledge in the longer term. Students in an educational context begin by engaging with established social knowledge (disciplinary content) through the interaction with others. This epistemic engagement or interaction with the content, and concurrently with others, enhances the quality of the learning process through critical discourse and negotiation.”

2.3.2 Community of Inquiry framework : Further development

Given the large volume of Community of Inquiry focused research, it is not surprising that there have been several attempts to expand, clarify or critique the framework.

Redmond (2014) seeks to develop the Community of Inquiry framework by defining reflection and adding specific indicators for reflection within cognitive presence. Like Jezegou (2010) the critique here is that a concept that Garrison et al. (2000) claim integral and central is only referred to in a non-defined manner i.e. assumptions are made on the part of Garrison et al. (2000) that there is a shared understanding of what reflection is, and that coding for it and searching for indicators is something that is done holistically rather than by assigning specific codes. Several aspects of reflection as defined by Redmond (2010) relate to metacognition and Akyol & Garrison (2011,2013,2015) recognised that the area of metacognition needs to be further investigated across the three presences with a view to operationalising the construct.

More substantial reworkings of the framework include Shea & Bidjerano (2010) who describe a fourth 'Learner presence', Cleveland-Innes & Campbell (2012) who argue for an 'Emotional presence', and Lam (2015), extending Shea & Bidjerano's (2010) work to focus on learners agency, in an 'Autonomy presence'. Anderson (2016), one of three original developers of the framework, suggests the latter is better termed 'Agency presence' as autonomy in the sense of student independence and freedom is often restricted by institutional norms and requirements. Garrison (in Anderson 2016) has criticized the search for missing elements, preferring to keep the original framework's parsimony intact and arguing that making the Community of Inquiry framework more complicated will make it less accessible for practitioners and researchers. Garrison (in Anderson 2016) also claims that in most cases the addition of another element would necessitate a completely new framework though he concedes the pervasiveness of emotion in online learning "The question is whether it is helpful to see emotion as emanating from social presence or as a distinct generalized environmental influence ... ". Cleveland-Innes (in Anderson 2016) accepts this but again asks for other terms within the original framework to be further defined:-

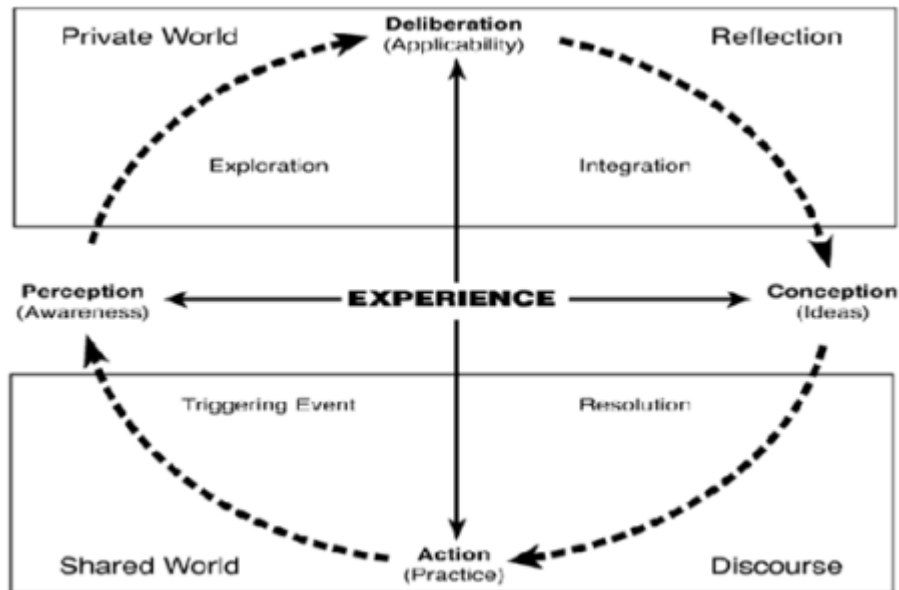
"To your point, the overlap among the presences, currently known as supporting discourse, selecting content, and creating climate, could definitely use more illumination. Perhaps through this work on overlapping presences, emotion's role, among other influences, could be further described."

This blog posting and subsequent discussion provides an interesting backdrop to the formal and peer reviewed writing found in the publications of Anderson, Garrison and Cleveland-Innes. For example, it becomes clear that of the original developers of the Community of Inquiry, Anderson is open to a fourth presence whereas Garrison states that a fourth presence will require that a new framework is developed. Further, Cleveland-Innes who has published with Garrison appears to be pushing for acceptance of the emotional within the original Community of Inquiry framework. This interplay (and knowledge) would be hard to pick up from even a thorough reading of the three authors' formal publications. Furthermore, and pertinent here, it provides an apposite example of an asynchronous text based discussion that displays a certain degree of knowledge construction. In the next section we will look at cognitive presence and the difficulties inherent with achieving the type of interaction that achieves higher order and critical thinking.

2.3.3 Community of Inquiry framework : Cognitive presence

A further diagram (see figure 2.2) shows how Garrison et al. (2001) see cognitive presence operationalised through the Practical Inquiry Model (PIM). In the literature the latter is consistently referred to as a model, probably as it is more prescriptive and specific than a framework. This thesis therefore refers to the Practical Inquiry 'Model', a specific model for examining cognitive presence, as sitting within the Community of Inquiry 'framework'. The latter is overarching and encompasses more concepts and how they relate to each other (e.g. teaching presence and social presence).

Figure 2.2 : Practical Inquiry Model in Garrison et al. (2001)



The Practical Inquiry Model provides four phases where cognitive presence can be measured. Firstly the 'Triggering Event' which presents a problem or issue from which to begin dialogue. Secondly, an 'Exploration' phase which is characterised by an exchange of information derived from personal experience and opinion, for example, brainstorming. Thirdly, an 'Integration' phase which is typically more structured and requires learners to construct meanings or provide a solution based on the previous exploration of ideas. Finally, there is a resolution stage where the initial problem is resolved and this solution is applied and tested either directly or indirectly and/or the solution is defended in some manner.

The four phases have been further divided into sub elements which have been used in a number of studies to code for evidence of cognitive presence within discussion transcripts (see figure 2.3 below). Chapter 4 Methodology examines the issues that arise when using an analytical framework such as this to code discussion transcripts.

Figure 2.3 : The Garrison et al. (2001) analytical framework for cognitive presence

Triggering Events		
Descriptor	Indicators	Sociocognitive Processess
Evocative	Recognizing the Problem Sense of puzzlement	Presenting background information that culminates in a question Asking questions Messages that take discussion in new direction
Exploration		
Descriptor	Indicators	Sociocognitive Processess
Inquisitive	Divergence-within the online community Divergence-within a single message Information exchange Suggestions for consideration Brainstorming Leaps to conclusions	Unsubstantiated contradiction of previous ideas Many different ideas/themes presented in one message Personal narratives/descriptions/facts (not used as evidence to support a conclusion) Author explicitly characterizes message as exploration-e.g., "Does that seem about right?" or "Am I way off the mark?" Adds to established points but does not systematically defend/justify/develop addition Offers unsupported opinions
Integration		
Descriptor	Indicators	Sociocognitive Processess
Tentative	Convergence-among group members Convergence-within a single message Connecting ideas, synthesis Creating solutions	Reference to previous message followed by substantiated agreement, e.g., "I agree because..." Building on, adding to others' ideas Justified, developed, defensible, yet tentative hypotheses Integrating information from various sources-textbooks, articles, personal experience Explicit characterization of message as a solution by participant
Resolution		
Descriptor	Indicators	Sociocognitive Processess
Committed	Vicarious application to real world Testing solutions Defending solutions	None Coded

The Practical Inquiry Model is derived from the writing of Dewey who felt that formal education had been wrong to place too much emphasis on the end goal of 'knowledge'. For Dewey it is the journey to get to that end goal that is critical i.e. the process of inquiry and reflection. Experience and action are central to Dewey's work and other writers have expanded on these ideas. Kolb (1984) developed a four stage 'Experiential learning cycle' which illustrated how reflection on experience creates concepts to guide future action which subsequently leads to new experience. The term 'reflective practitioner' was coined by Argyris & Schon (1974) and Schon (1983) later provided a classification of reflection in action (during an event) and reflection on action (after the event). Schon's ideas have been applied extensively to the practice of teaching though not without criticism (e.g. see Eraut, 1995). Rodgers (2002), a teacher educator, problematizes a definition of reflection and endeavors to clarify Dewey's intent through four criteria: 1. Reflection as a meaning-making process; 2. Reflection as a rigorous way of thinking; 3. Reflection in community; 4. Reflection as a set of attitudes. Using reflection to assist in making meaning, (criterion one) requires learners to consider how to use their experiences to

gain a 'deeper understanding of its relationships with and connections to other experiences and ideas' (Rodgers, 2002:845). The second criterion presumes learners use reflection as part of their disciplined, systematic, and rigorous thinking processes: where they have an open mind, to take on new or different meanings, rather than only those ideas which align with their initial perspectives. The third criterion takes us back to the term community and its importance will be discussed further in Chapter 6.4. The fourth criterion includes attitudes or dispositions that a learner brings to an educational experience (e.g. whole-heartedness, directness, open mindedness) which can either aid or prevent reflection. This last criterion shows us that Dewey's conception of reflection is holistic including both the emotional and the intellectual.

Even with a brief review of the literature it is clear that there are a plethora of approaches to defining and measuring reflection. Regardless of model and framework deployed, high levels of reflection do not occur easily i.e. the ideal of the reflective teacher is problematic. Yang (2009) used blogs to encourage reflection in post-observation discussions and discovered that, although there was high and interactive participation among pre-service teachers, overall their reflections tended to be more descriptive than critical in nature, mainly because they feared offending others and damaging friendships. Yang (2009) also noted the importance of facilitator intervention in order to stimulate critical reflection. Similarly, Farr & Riordan (2012) noted the different degrees of reflection when using online chats and discussions forums to encourage reflection in post-observation discussions. In their study, discussion forums were found to have comparatively low interactivity and little reflection. This brings us to a discussion of the reported flaw with the Community of Inquiry framework as identified in Chapter 1.3 'The statement of the problem'.

2.3.4 Cognitive presence : Evidence of higher order thinking

That learners progress through all of the phases of the Practical Inquiry Model to have a meaningful educational experience is integral to the theoretical foundation of Community of Inquiry. However, Kanuka & Rourke (2009:43) in their review of Community of Inquiry literature note:

"Bracketing the methodological deficiencies of student assessment in the Col literature, our review indicates that deep and meaningful learning does not arise in Col. A synthesis of the self-report data produces the following picture: Students believe that they learn a lot in Col, but the type of learning is lower-level, factual knowledge (we hesitate to characterize the outcomes as surface learning). Respondents believe that the processes and activities through which they gain this knowledge is didactic instruction and independent work."

This is a significant claim that if accurate should have implications for the field of online education, both within Higher Education and without, where millions of learners each year are encouraged, or often coerced through assessment, to participate in asynchronous discussions. Garrison et al. (2001) themselves had indicated that students were not proceeding to the integration and resolution phases, but this was assumed to be an issue with teaching presence and a lack of appropriately designed activities e.g. those that *required* resolution of some form.

More recently, Garrison et al. (2010) and others (e.g. Aykol et al., 2011) still assert that it is likely a matter of instructional design, facilitation and direction (i.e. teaching presence) that is preventing this from occurring. This is in contrast to the conclusions reached by Rourke & Kanuka (2009:53) from the aforementioned review of 252 reports that referenced Community of Inquiry between 2000 and 2008.

“A synthesis of the data on perceived learning contradicts the assertion that students engage in deep and meaningful learning through sustained communication in critical communities of inquiry. According to Garrison et al. (2001, 2000), students should be acquiring the types of knowledge and higher order skills associated with a university education-critical thinking, epistemic development, deep and meaningful learning and they should be acquiring these through sustained critical discourse. They are not.”

Other writers that have not found these ‘higher order skills’ include Luebeck & Bice (2005) who, when using the Gunawardena et al. (1997) interaction analysis model to analyse a graduate level mathematics course, did not find evidence that interactive discussion had led to conceptual change. They suggest, though, that this could have been a result of inexperienced online facilitators not having the ability to push students to higher cognitive levels and/or the data analysis model not being able to interpret knowledge construction with this specific graduate course content. Cheung & Hew (2005) found classmates giving opinions to their peers queries was the most prevalent form of communication, and that there was no progression to the higher stages of the Practical Inquiry Model. This built on previous research, Hew & Cheung (2003), where surface level thinking such as this was attributed to a general lack of the critical thinking skills required to progress through the Practical Inquiry Model phases i.e. evidence of conclusions drawn without justification for that position, solutions that lacked adequate explanations, and participants agreeing with peers but not taking the ideas further as would be required for new knowledge construction. The Practical Inquiry Model predicts that these skills develop and are acquired organically as a normal consequence of engagement with a Community of Inquiry. i.e. there are no assumptions that these skills should pre-exist for successful learning.

Guzdial (1997) when investigating interaction in 17 newsgroups noted that a typical forum thread contained just a single message with a single answer. Similarly, Pawan et al. (2003) in their research of language teachers confirmed Henri’s (1992)’s observation that asynchronous discussions often produce serial monologues rather than collaborative knowledge creation. While a serial monologue might include an element of reflection on, in the case of their research, past teaching experience, there is no attempt to engage with others and could therefore be described as a one-way dialogue and not socio-constructivist in nature. The lack of higher cognitive phases led Pawan et al. (2003) to speculate whether the text based nature of online discussions was leading us to expect more critical thinking than we would from spoken discussions in a face to face context. The writers go on to make some practical recommendations that might counter the lack of collaboration (two of these relate to an increase in teaching presence: one being the design of discussion task and assigning leadership and other roles to participants, while one is metacognitive in nature where participants are required

to label their contributions as per the stages of the Practical Inquiry Model i.e. triggering event, exploration, integration, and resolution). The writers admit that their research left many questions unanswered e.g. is the nature of a classroom (be it online or offline) more suited to the lower levels of the Practical Inquiry Model (e.g. information sharing) than the higher (e.g. knowledge synthesis and integration)? Is the latter more likely to occur in assignments or research papers? In line with the critique of Rourke & Kanuka (2009), an affirmative response to these two questions would have far reaching implications for online learning design.

Cho & Tobias (2016) examined the impact on the three Community of Inquiry presences, learning outcomes, satisfaction and time spent on course with three different learning designs: no online discussion, online discussion but with no instructor presence and discussion with full instructor participation. Results from the study found no difference in learner satisfaction, achievement or time spent on the course between and amongst the three designs (there were some differences in social presence noted, and degree/quality of interaction with the instructor was seen as the most important contributing factor to this). The writers conclude that online discussion should only be included in a course where there is a clear learning objective to be met through its inclusion. Specifically, they suggest that course type may determine whether online discussion is beneficial for learners - the course in question required only understanding of basic concepts within a specific content domain and could easily be achieved through self-study alone. Linked to this, other research has posited the importance of discipline studied on likelihood of reaching the higher stages of the Practical Inquiry Model (see for example Arbaugh, 2013 and his examination of Community of Inquiry with 'harder' subjects such as the MBA). These are important considerations as the current situation, arguably, is that online discussion is included in course design by default regardless of the discipline, particular type of course, or required learning outcome.

However, other research has suggested evidence of higher level thinking. Zhu (2006) noted that design and instructor nurturing (i.e. teaching presence in terms of the Garrison et al., 2001 framework) was paramount and far more important than, for example, the affordances that a particular technology might provide. It was only with well planned, well designed and carefully implemented activities that higher levels of cognitive engagement and knowledge construction were evidenced. Similarly, Schellens & Valcke (2006) found that asynchronous discussion with task orientated design facilitated higher levels of knowledge construction when compared to synchronous discussion. The findings also revealed that the higher the volume of discussion the higher the cognitive engagement with a similar increase in the latter when the group size ($n < 14$) was smaller ($n < 14$). However, it should be noted that neither of these studies made specific use of or reference to the Community of Inquiry framework. Schrire (2004) deployed the Practical Inquiry Model and the cognitive presence construct (one of three frameworks deployed, the others being Bloom's taxonomy and the SOLO taxonomy) to explore interaction patterns and cognition within distance learning doctoral degree courses in education. Each asynchronous text based forum did differ in terms of the phases and levels of cognition shown and Schrire (2004) saw this mainly as a result of an instructor led course design versus a more collaborative design, with the latter more reliably achieving the higher stages of the Practical Inquiry Model.

As noted above, Garrison et al. (2001) attributed poor task design (i.e. an element of teaching presence) when they found a lack of higher cognitive phase in their study. Kanuka, Rourke & Laflamme (2007) also noted (previous to the later critique of the framework) that instructional activities can influence the type of contributions students make in online discussions e.g. webquests evidenced higher levels of cognitive presence and invited experts showed low levels. Garrison & Arbaugh (2007) reiterate the importance of teaching presence but also highlight the importance of group cohesion i.e. (an element of social presence, the others being open communication and affective expression). While writers have posited the importance of social presence as an enabling basic condition for higher levels of cognitive presence, social presence in and of itself is not enough for a 'successful' Community of Inquiry (Tolu & Shuford Evans, 2013). Similarly, Nichols (2009) states that social presence is only of use if it allows learning to occur. Garrison (2013:6) referencing Dewey notes the importance of 'common interest', 'desire' and 'will to progress' for a Community of Inquiry. Motivation must be maintained and building a shared community identity where there is trust and respect is the remit of social presence. They also highlight that "setting the emotional climate may well be much less onerous than creating cognitive presence and disciplined inquiry".

For the purposes of this thesis we will focus on the design of instructional activities and whilst recognising the importance of social presence in any Community of Inquiry, this will not be a variable for direct investigation. We turn now to teaching presence and the literature on how this may impact cognitive presence within the phases of the Practical Inquiry Model.

2.3.5 Community of Inquiry framework : Teaching and cognitive presence

A critical feature of a successful Community of Inquiry as theoretically conceived by Garrison et al. (2001) is that the teaching presence is not a role purely taken on by a single individual (more typically the course tutor) but that it is a responsibility that is distributed throughout the community. In a discussion in a forum on the Community of Inquiry website in response to a PhD student raising methodological issues, Garrison (2014) writes

"With regard to the second article, this is where I have some reservations. While I think it raises some interesting issues, the problem is that it implicitly creates new presences (Teacher SP and Student SP) that violates the basic premise and assumptions of a community of inquiry. That is, TP is distributed among all the participants. Each of the participants take responsibility for teaching, social and cognition to the best of their abilities."

Further, when discussing again the possibility of a fourth presence, Garrison in Anderson (2016) refers to the teaching presence being distributed amongst community members as a basic premise of a Community of Inquiry.

"As I understand the other suggestions for a fourth presence, they violate the basic premise of the CoI framework in terms of participants being both teachers and learners and therefore the

interdependence of the elements. In essence what is being suggested is a new framework; it would no longer be the CoI theoretical framework and should be indicated as such.”

Community and inquiry are central to the theoretical basis of Community of Inquiry and a collaborative constructivism operationalised through the Practical Inquiry Model is fundamentally incompatible with a tutor led didactic instruction method. Garrison (2013:6) does admit however that “there is likely to be one or more persons with pedagogical and disciplinary expertise that will be expected to provide purposeful leadership at recurring intervals”. Pawan et al.(2003), as referenced above, made the suggestion that this role is explicitly assigned to participants, rather than it evolving naturally through the ongoing dynamics of a Community of Inquiry. Rourke & Anderson (2002) had previously designed for teaching presence where participants were requested to lead discussions, with some benefits reported. However, Hay et al. (2004) indicated when comparing face to face and online courses that the instructor to student interaction measure was the most reliable predictor of effectiveness of the course (as opposed to student to student interaction). Others (e.g. Stodel et al., 2006) indicate that the requirements of this role i.e. the pedagogical and disciplinary expertise that Garrison (2013) alludes to, will often be beyond the capabilities of participants. Garrison (2014) in the forum posting above notes that participants should perform this to the *best of their abilities*, which acknowledges that there may be difficulties in doing so. For example, would it be realistic to expect a pre-service trainee teacher to lead a discussion on an aspect of teaching without any experience of that area of focus? Furthermore, to ask that they do this with no training in the specific methodology and techniques (e.g. weaving, summarising) that a professional online tutor has at their disposal to facilitate this type of discussion. Shea et al. (2014) state that there will always be a qualitative difference between the tutor and participants regardless of role distribution. Perceptions may also be problematic, Swan (2001) found that there is a far more significant relationship between perceived learning in a Community of Inquiry and teaching when the interaction is instructor to participant rather than participant to participant. So to summarise, though the sharing of teaching presence is a fundamental theoretical construct of Community of Inquiry, in practice it would seem difficult to achieve consistently.

2.3.6 Teaching presence : design responses

There is a significant body of literature that examines the quantity of interaction that a facilitator may provide, or put another way, the visible presence of an instructor (the latter is sometimes referred to *teacher* presence as opposed to *teaching* presence). This is linked to research on the different patterns of interaction, how this is perceived by students, and the various impacts on learning (see for example, Mazzolini & Maddison, 2007; Kang & Im, 2013; Feeler, 2012). An et al. (2009:1) designed a study which compared three groups that required different interaction patterns (as per task guidelines) and found evidence that “when the instructor’s intervention was minimal, students tended to more freely express their thoughts and opinions”. Salmon’s (2011) five stage model makes a gradual reduction of tutor interaction explicit. In the initial stages where access (e.g. technical issues), motivation and socialisation are achieved there is high interactivity. However, this reduces in the last stage i.e. development where the community itself has, in Community of Inquiry terms, taken over much of the teaching presence role. Salmon’s

model has been criticized as being overly linear, but it is commonly deployed for online learning design and the principle of increased to reduced tutor interaction is a widely practiced one (though the degrees to which this should occur will be contested). While teacher presence and community interaction patterns are productive areas of enquiry, it is beyond the scope of this thesis. Similarly, explicit strategies that require participants to take on teaching roles will not be explored.

Other writers have focused on teaching presence adaptations that draw on the metacognitive abilities of the students. For example, Gao (2014) references a research strand focused on teaching presence termed 'Constrained Online Discussion Environments'. CODE can be constrained by the software that only allows a certain response (see for example the Optima CMC environment deployed by Rienties et al., 2013) or constrained by an instructor's strategy/approach. In the case of Gao (2014) the labelling of the Practical Inquiry Model stages by students is explored (in line with the suggestion that was made by Pawan et al. (2003) to overcome lower level thinking). The results are inconclusive with some clear issues with the use of labelling, for example, participants incorrectly labelling the Practical Inquiry Model phases. Deploying the same interaction codes used in the Gunawardena et al. (1997) study, much of the cognitive presence identified was low level. The author posits that this may be because of the nature of the topic, i.e. not argumentative or a debate format as was found in the Gunawardena et al. (1997) design. Again, while the intentional use of metacognitive strategies in discussion tasks is a very useful direction of research, it is beyond the scope of this thesis.

Pertinent to this enquiry, Garrison (2013:6) quotes (Kennedy & Kennedy, 2010:10) to exemplify the 'function' of teaching presence.

"...the facilitator triggers the system through raising counterexamples and counter-claims, emphasizing certain elements of the argument, introducing new perspectives or questions when the inquiry seems to have lost direction, or making procedural suggestions – for example moving to a different question that is directly or indirectly related to the concept or problem under inquiry."

In this example, Garrison & Akyol (2013) are illustrating teaching presence as it moves beyond an initial task design and relies more on the instructor's ability to react spontaneously and competently to a developing discourse. Darabi et al. (2011) describe this as scaffolding and see it as effective, but time consuming, and warn it might be impractical for large classes. Richardson et al. (2015) seek to conceptualise this as instructor presence. This is not a new presence, as such would be rejected by Garrison, but an articulation of the overlap between teaching and social presence and a distinction between that which is course design, and that which is instructor led (this could also be taken as the difference between 'structured' and 'scaffolded' as described in Darabi et al., 2011). Richardson et al. (2015:259) point to the fact that increasingly the instructor and course designer are not one and the same person and provide a definition:

“...we are defining instructor presence as the specific actions and behaviors taken by the instructor that project him/herself as a real person. In other words, instructor presence relates to how an instructor positions him/herself socially and pedagogically in an online community, and would fall at the intersection of teaching presence and social presence within the Col framework.”

This type of spontaneous facilitator competence is more difficult to design and account for than asynchronous task design in exploratory research. i.e. the former is difficult to quantify and control, whereas the latter can be easily standardised, fixed and measured. There have been a number of studies that have used asynchronous task designs to investigate the impact on cognitive presence through teaching presence. Meyer (2004) indicated that the formulation of questions can directly affect teaching presence. Exploring this, Sadaf & Olesova (2017) used pre-determined questions based around the Practical Inquiry Model as opposed to ‘playground questions’ (see Andrews, 1980) as discussion prompts and then measured the impact on the online discourse in terms of progression through the Practical Inquiry Model’s four phases. Sadaf & Olesova (2017) found that the Practical Inquiry Model questions, used to trigger discussions based around authentic cases, showed higher levels of cognition. They conclude from the results that cognitive presence is not a natural result of any interaction in a Community of Inquiry but must be carefully designed for through the wording and delivery of discussion prompts. A limitation of the study that the author’s reported was the size of the sample but also that there were only two Practical Inquiry Model discussions. There was an increase in cognitive presence in the second Practical Inquiry Model discussion as opposed to the first Practical Inquiry Model discussion, which they assign to the participants having had more practice with the task type. They suggest that future research over the course of a semester would be able to examine increases in cognitive presence i.e. could this continue to increase over the duration of a course (Akyol et al., 2011 explore the importance of time and progression in the development of Community of Inquiry and reported the significance of time on the development of Cognitive Presence, Social Presence and Teaching Presence). It is important to note here that Sadaf & Olesova’s (2017) design included forced participation, which has many critics (e.g. see Dron, 2016).

Darabi et al. (2011) used a similar case based format but with a task design of structured (i.e. pre-structured discussion prompts as per Sadaf & Olesova, 2017), scaffolded (as per example above), debate (argumentation, dialogic theory) and role play (this is not the assigning of teaching role as discussed above but playing the role of an individual within a problem based scenario). The writers found in contrast to Sadaf & Olesova (2017) that the structured strategy was only associated with the lower phases of the Practical Inquiry Model, with no progression to the resolution phase. Darabi et al. (2011:223) speculate that the reason for the low cognitive presence evidenced is the simplicity of the task when compared with the other strategies they deployed:-

“The reasons for the structured strategy not being strongly associated with the higher phases of cognitive presence, we speculate, include learners’ uncritical responses to questions and their not being required to state a position or argue for one – the elements of the more complex

strategies. They had a limited task requirement and an inadequate mechanism to lead the discussion towards a meaningful resolution of the ideas.”

They noted that often students might just reformulate the structured questions posed and provide an example where one student’s declaration is not challenged or built upon by other students (the need to comment on others posts was made explicit in the task design). With regards to the impact of the other strategies, Darabi et al. (2011) found the scaffolded strategy was associated most strongly with resolution, while the role play and debate were more associated with exploration and integration. Debate was also deployed by Richardson & Ice (2010) but with a far higher incidence of Integration phase. (see table 6.1 in Chapter 6.2 for direct comparisons of Community of Inquiry studies). Darabi et al. (2011:224) provide an analysis of debate that details the characteristics that make it more ‘complex’.

“The debate strategy added a more complex instructional feature by requiring the learners to argue either for or against an intervention. This task was more complex because of the argument dimension in which learners had to interact, take a position, and own it so that they explore and integrate the content in preparing their argument.we argue that the strategies elicited fundamental cognitive processes on the part of learners. Throughout the debate they examined, compared and contrasted alternative solutions through which they were exposed to the complexity of critical thinking about solving the problem. The learners’ mental effort to generate discussion postings that justified their position on the debate issue and convinced their counterparts of this justification led to integration of ideas that elevated their thinking”

Ertmer & Koehler (2015) again used case based discussions and compared those that were facilitated versus non facilitated (or scaffolded and structured as per Darabi et al., 2011) finding that the former had improved learning outcomes. The writer’s measured this through the extent and quality of the ‘problem space’ that was covered. Interestingly, the quantity of posts for each strategy was similar, but the quality achieved was significantly higher for the facilitated courses. Ertmer & Koehler (2015) found that while the opening discussion prompts were useful in triggering initial exchanges and providing focus for students to begin work, they were not able to provide enough support through to the end of the task (1 week period) where a solution was required (i.e. the resolution stage of the Practical Inquiry Model). Ertmer & Koehler (2015) list the attributes of good facilitation and see a fundamental aspect as enabling useful dialogue to occur but also ‘strong questioning skills’, and ability to ‘scaffold student thinking’. Hosler & Arend (2013:159) see case studies (along with course projects) as an effective pedagogical approach for achieving the resolution phase in the Practical Inquiry Model.

“Case studies, when aligned with course outcomes, provide learners the opportunity to investigate ill-defined problems reflective of the messy complexities of real-life...providing exposure to settings and contexts they might not otherwise experience. As students work through a case study, there is ample opportunity to test out possible solutions, discuss alternative resolution scenarios and confirm their understanding. Case studies provide meaningful vehicles for online students to synthesize and evaluate their answers to pressing problems and to try out various solutions in the safety of a hypothetical situation. As such the

use of case studies, encourages analysis, appraisal interpretation and testing solutions, all components of critical thinking and the resolution stage.”

The pedagogical approach appears to align well with the original intention of Dewey’s practical inquiry in education. However, their use is by no means ubiquitous. Richardson & Ice (2010) note that open ended discussion is one of the most commonly used strategies in online learning and use this, alongside case based studies and debate to measure both progression through the Practical Inquiry Model, but also student preference for each different instructional strategy. Their hypothesis was that levels of cognitive presence would vary across the strategies, which was confirmed, and that student preference for learning strategy would tally with that strategy which was the most effective, which was not confirmed. Richardson & Ice (2010:57) speculate that students do not “always realize what is good for them, or that they are not truly conscious of their meta-cognitive strengths and abilities or how to employ learning strategies”. Open ended discussion had the lowest levels, which as the most commonly deployed strategy in online learning, is significant. Again, case based studies had the highest levels of cognitive presence. As with other writers above, Richardson & Ice (2010) consider time to engage in a discussion and comfort with instructional strategies as possible enablers/barriers to achieving higher cognition levels.

Richardson et al. (2012) found that Critical Incident (see Andrews, 1980) questions which required participants to solve authentic problems (again congruent with the concept of real world problem and solution such as case study), had the highest association with resolution phase. However, in agreement with Cho & Tobias (2016) they stress that design should follow from the intended learning outcomes of the educational experience. The authors question whether the aim of every discussion forum should necessarily be to achieve higher order thinking and list Lower Divergent, Shotgun and Analytical Convergent question prompts (see Andrews, 1980) as better suited to information exchange type activities i.e. exploration phase. Pawan et al. (2003) have also questioned whether a discussion forum is the best place for higher thinking such as resolution, though this would appear to be in contradiction to the fundamental basis of Community of Inquiry.

Bradley et al. (2008) found that most of the cognitive presence evidenced was low level when they used 6 different question types (direct link, course link, brainstorm, limited focal, open focal and application - see Andrews, 1980) in discussions. The question types that evidenced the highest cognitive presence were course link, direct link and brainstorm (course link and direct link are two versions of ‘playground questions’ as used in the Sadaf & Olesova, 2017 study). Bradley et al. (2008:898) state that course link had the highest cognitive presence and required learners ‘to bring in prior knowledge or outside resources, which if done successfully, resulted in a rating of at least a three on the coding scheme’. They suggest future research could use questions that require a student to use a real world or abstract example (i.e. not dissimilar to the the higher stages of structured and the Practical Inquiry Model questions as described in Sadaf & Olesova, 2017). It should also be noted that Bradley et al. (2008) used Bloom’s taxonomy to measure higher/lower order thinking rather than the Practical Inquiry Model.

Lastly, Ke & Xie (2009) used closed and open discussion questions in their study and attempted to measure learner perception of deep/surface learning and satisfaction in relation to the different questioning types. Not surprisingly, the closed type questions (the author gives the example 'What is ANOVA?') provide the lowest number of interactions and showed the least learner satisfaction. This contrasts with the open discussion questions which the writers report as providing higher levels of cognitive presence e.g. new knowledge construction. However, the design that featured both open and closed discussion prompts ('integrated' as described by the authors) achieved the highest learner satisfaction and sense of community. Similar to the general criticism of socio-constructivism noted earlier Ke & Xie (2009:144) suggest "it can be assumed that the integrated discussion task type caters to the diverse needs of adult students who may enjoy either fact-related directness or experience-oriented openness in online discussion contexts". This is a contentious point perhaps in relation to the Community of Inquiry framework which would not seem to allow for closed questions from a theoretical standpoint, but mirrors Rourke & Kanuka's (2009) criticism that knowledge gained is often lower level facts through didactic instruction. Ke & Xie (2009) write that although the learners reported deep learning strategies this was not evidenced in the discussion transcript analysis but posit that this may be occurring offline and outside of the researchers' analysis. Ke (2010) later makes this point more strongly and suggests that this is a major weakness of research that focusses on transcript analysis alone i.e. it should be triangulated with other offline evidence of deeper learning (see Chapter 7.1). Ke (2010:818) also critiques the use of grade orientated discussions and the resulting quality of interaction commenting

"the explanation may be that the more *enforced* online discussions are, the more students will perform non-knowledge-constructive interactions for grading purpose. Therefore, a natural question to online instructors is, "Should we tone down the role of online discussions in learning participation?"

Given the prominence of socio-constructivism as the 'leading' learning theory of our time, this is a controversial but important question.

2.4 Conclusion

In summary, there is much contradictory research concerning the validity of the Community of Inquiry framework and also outside of this, the accepted routes to a meaningful educational experience in an online context. Interaction is a common theme in distance and now online education and there is considerable debate as to how to make use of the increased potential for interaction in this new digital environment. In short, it is a highly contested field of research beset with claims and counterclaims offering few areas of agreement.

In terms of this study, the key concept to be explored is the level of cognitive presence evident in online discussion forums. As above we take 'cognitive presence' to be "the extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained communication" (Garrison et al., 2001:89). The four cognitive presence phases of the Practical Inquiry Model that will be identified are triggering, exploration,

integration and resolution. This literature review informs us of previously 'successful' designs that increased levels of the higher phases of 'cognitive presence' (i.e. integration and resolution). These are tasks that are case based, debate type or structured Practical Inquiry Model questions (although it is important to note that the degrees to which these succeeded did vary and there were contradictory results reported above). These designs will be deployed with one group of learners, while another group will engage in tasks that are the most predominant in online learning i.e. the typical 'open ended discussion design' (Richardson & Ice, 2010). The context for this thesis and design of the study will be discussed in detail in the two following chapters.

Chapter Three Context

3.1 Introduction

The purpose of this chapter is to provide detailed context for this research enquiry. This will begin with the background of the British Council and its historical engagement with language teacher professional development (both face to face and online). The same section will look at the British Council's teacher development portfolio/offer and introduce a classification of course type. The following sections will provide relevant technical information (e.g. details concerning the Learning Management System), outline the specific course that is the focus of this study and lastly provide details on the participants' and moderator profiles.

3.2 British Council and language teacher professional development

The British Council is the United Kingdom's international organisation for cultural relations and educational opportunities and is a UK charity governed by Royal Charter. It was founded in 1934, in part, to counter Nazi propaganda and influence. Today the British Council aims to 'create friendly knowledge and understanding between the people of the UK and other countries'¹. As of January 2017, the British Council is present in over 100 countries and works in the fields of arts and culture, English language teaching (ELT), education and civil society. The organisation claims to reach in excess of 20 million people face-to-face (e.g. direct English teaching operations, conferences etc) and more than 500 million via broadcasts, publications and/or online technologies. The ability to demonstrate reach and engagement are important for the British Council as this is monitored for return on investment (ROI) by the UK government. The use of technology to increase reach, engagement and revenue has been a key organisational driver in recent years.

In the field of ELT the organisation teaches English and trains English teachers through a variety and/or mix of channels i.e. face to face, digital and broadcast media. The organisation conducts over three million UK examinations worldwide (e.g. International English Language Testing System, IELTS). A significant proportion of British Council activity in arts, education and society is funded by government grant, whereas a high percentage of its English language work is revenue generating and self funding. Within the field of English Language Teaching, the British Council aspires to the position of 'world authority' and is a prominent ELT organisation globally.

The British Council training of English teachers through direct face to face instruction is thought to have begun circa 1940. In recent years, this support for English teaching has focused more on capacity building and attempts to transform the way English is taught in public education systems. This is in part a recognition that the type of intervention that was often employed by the organisation in the past (typically infrequent workshops, short courses or annual/one off conferences with little or no follow up) has not produced the desired change in teacher practice

¹ <https://www.britishcouncil.org/organisation>

that was intended. The inefficacy of in-service teacher training delivered infrequently and outside of a teacher's classroom context has been well documented e.g. Fullan (1991:315) writes, "Nothing has promised so much and has been so frustratingly wasteful as the thousands of workshops and conferences that led to no significant change in practice". Similarly, Yoon et al. (2007) note the 'abysmal' track record that workshops have in terms of impacting classroom practice and student achievement.

Online teacher development has a shorter history with the first fully online courses offered in 2008. As of January 2017 the British Council has a diverse English teacher development product portfolio ranging from individual three hour self access modules to fully tutor moderated courses made up of standardised multiples of modules. Additionally, the British Council offers a fully online Masters of Arts in TESOL in partnership with Southampton University. Another significant partnership is with the Open University's Massive Open Online Courses (MOOCs) provider FutureLearn. Since August 2015, 164644 participants have registered for a series of MOOCs entitled 'Professional Practices for English Language Teaching'. In 2014 the British Council began to rationalise and standardise its offer to move to a more flexible modular approach tied to a new Continuing Professional Development Framework (CPDF) for teachers. Outside of these courses, the British Council also developed in partnership with the British Broadcasting Company (BBC) a website called TeachingEnglish (see teachingenglish.org.uk). The British Council uses social media channels such as Twitter and Facebook² to both promote its products and provide links to further resources and Continuing Professional Development (CPD) opportunities.

Currently, the British Council distinguishes the majority of its online teacher development work according to four business models (see table 3.1)

Table 3.1 : Course classification

Model Type	Cost	Product	Audience	Mode
1.Business to Customer (B2C) (offer for individuals)	Paid	Teacher development modules and short courses, Southampton/British Council Masters in ELT	Global	Online
2.B2C	Free	MOOCs, TeachingEnglish website	Global	Online
3.Business to business to customer	Paid	Teacher development modules and courses	Global	Online

² As of 30.4.17 the British Council TeachingEnglish Facebook page has 3,809,389 'likes'

(B2B2C) (offer for schools or institutions)				
4.Business to Government (B2G) (offer for governments or larger educational organisations)	Paid	Teacher development modules and courses	Local in city, country or region	Online F2F Blended

As such, the course offered for this research and which is described in detail in Chapter 3.5 below falls into the 2nd category i.e. B2C, free, global audience and fully online.

3.3 Learning Management System and Learning Content Management System

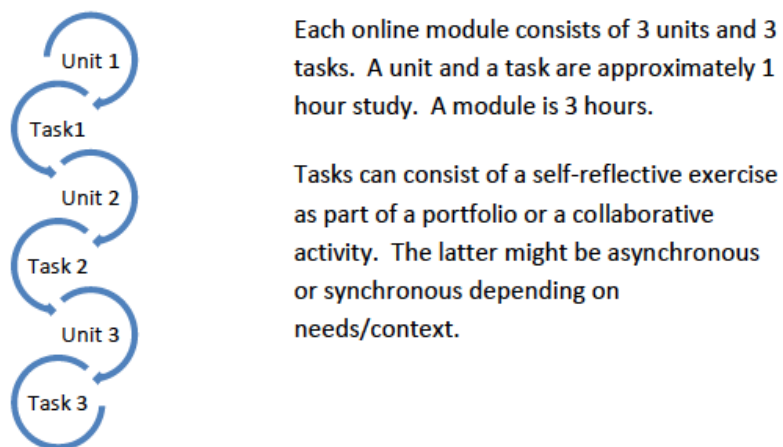
Until mid 2016, the organisation's sole Learning Management System (LMS) for teacher development was Moodle. As was referred to previously (see Chapter 2.2), Moodle is an academic open source LMS which was initially used in Higher Education before spreading across all sectors. Moodle is reported to have more active users than any other LMS (approx. 89 million active users). Since mid 2016 and as part of the British Council's project to modularise its teacher development portfolio, there has been a transition to a new LMS called Thinking Cap. Thinking Cap, though sharing some of the functionality of Moodle, is more accurately described as a corporate LMS. Unlike Moodle, Thinking Cap is a proprietary LMS and owned by a company based in Toronto, Canada. Establishing and or comparing the effect that the LMS has on learning is beyond the scope of this enquiry but it should be noted that choice of LMS itself has been reported to affect not only student satisfaction with a course but their perception of the three Community of Inquiry presences (see Rubin et al., 2013).

A driver for the move from Moodle was the need to separate content production created in a Learning Content Management System (LCMS) and content delivery through the LMS. This is possible to an extent via Moodle but most content in the latter is written directly into the LMS (termed as 'flat Moodle') and is less easily managed and less portable across different LMS. The new corporate LCMS, 'eXact', allows staff to author interactive content and export in Sharable Content Object Reference Model (SCORM) packages which are then delivered via the LMS. SCORM is a technical standard that allows for communication between interactive content and the LMS. It does not necessarily imply any pedagogical or instructional approach, though SCORM does lend itself to a more linear format for learning than, for example, a course authored in 'flat Moodle'. The LMS functionality is similar to most academic/corporate LMS including user profiles, forums, messaging and a home page displaying news and recent forum postings. The 'back end' administration of the LMS allows for a range of reports on user activity.

3.4 British Council teacher development courses

The design of British Council online teacher development modules follows three key principles : flexibility, consistency and ease of delivery. As many B2G (type 4 in the classification above - see table 3.1) teacher development projects are blended (combining both face to face and online delivery) the online modules need to be interchangeable with the face to face modules. That is, they have the same intended learning outcomes and should take teachers approximately the same amount of time to study (three hours per module). The way these learning outcomes are achieved will differ slightly as the modes of delivery do not allow for precise mirroring of activity type and interaction. Figure 3.1 shows the format for the 3 hour online modules.

Figure 3.1 : Online module design



While the ideal is that every project would provide blended delivery with the online course taking a socio-constructivist approach (see Chapter 2.2), this is not always possible for a number of reasons (client preference, teacher time, costs, logistics etc). So in line with the key principle of flexibility, all content can be delivered either self-access (i.e. fully non-collaborative) or fully collaborative, and purely online or purely face to face with any blend of these pedagogy/mode of delivery possible. So, for example, in this case the global audience dictates that the course must be fully online and either self-access or fully collaborative.

3.5 The course : Applying approaches to special educational needs (SEN)

The course consists of twelve, 3-hour modules. The modules are as follows:-

1. Getting Started (a standard introductory module which begins the process of socialisation and gives guidance on the platform and course methodology)
2. Understanding special educational needs (SEN)
3. Engaging with SEN - dyslexia
4. Engaging with SEN - attention deficit hyperactivity disorder
5. Engaging with SEN - dyspraxia
6. Engaging with SEN - visual, hearing and physical impairment
7. Engaging with SEN - gifted and talented learners
8. Engaging with SEN - inclusive assessment approaches
9. Engaging with SEN - autism spectrum disorder
10. Engaging with SEN - social, emotional and behavioural difficulties
11. Engaging with SEN - speech and language
12. Engaging with SEN - multicultural influences

The course was developed partly as a result of the British Council's explicitly stated commitment to Equality, Diversity and Inclusion (EDI) (see appendix 1 for a description of approach as of 2013) and partly through perceived global demand for a course of this nature. The course description is as follows³:-

Work with your moderator and other participants to look at how to build an understanding of Special Educational Needs into your classroom practice. Work through 12 modules covering a wide range of needs.

The modules in this course fall under the professional practice Using inclusive practices. This includes:

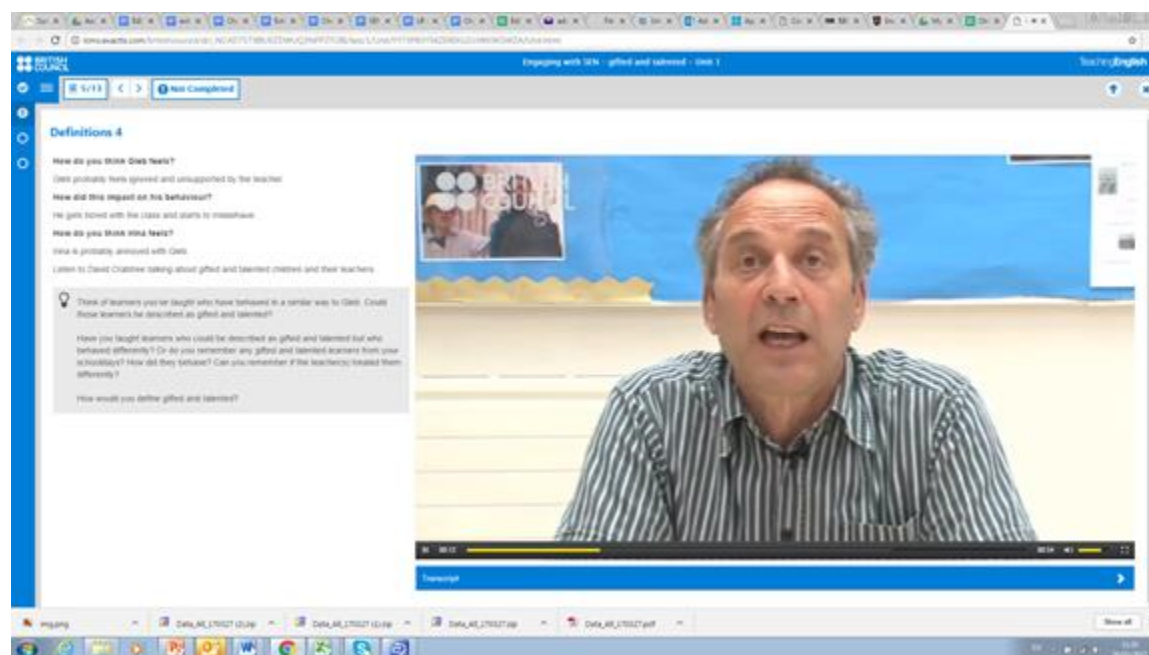
- Recognising and valuing diversity among my learners
- Using pedagogical strategies that encourage inclusive education within a supportive learning environment.
- Supporting my learners in identifying, addressing and assessing realistic individual learning goals based on reasonable adjustment.
- Being aware of my beliefs and how they can impact on establishing and maintaining an Inclusive learning environment.
- Assessing individual learners in a variety of ways that allow them to demonstrate the progress they are making.
- Treating all my learners equitably and with respect.
- Developing positive attitudes towards diversity in my learners.
- Involving parents, learners and other relevant individuals in creating an inclusive learning environment.
- Reflecting on how inclusive my learning environment is and taking steps to improve it.

³ <https://tinyurl.com/mhecbcn> accessed 30.03.17

To pass the course you need to score at least 70% in online exercises. You also need to contribute to online forum discussions and webinars (online workshops that take place in real time), to demonstrate your application of course content in your teaching

The course consists of a variety of 'static' content (e.g. text based content, images, video, and interactive activities e.g. see figure 3.2 below). Accessibility is a key concern for the British Council given its explicitly stated values around EDI and there are a number of course features which have been built in to address this (e.g. tapescripts and image descriptions). The 'dynamic' content consists of the course forums (see figure 3.6 below) which have standard features for asynchronous discussion (e.g. reply, start new thread, attach file, like or vote for favourite post). Participants that 'pass' a British Council course or module receive a certificate (British Council courses are certified but not accredited by an external organisation).

Figure 3.2 : Static content



3.6 The course : a typical week

As noted above, a module consists of three hours of study and three tasks. However, for the purposes of this research the format was changed to three hours of study followed by one asynchronous task. The rationale for this was that three tasks could dilute the level of participation and interaction in each discussion forum and therefore reduce relevant data for analysis. Each module and discussion was spread over the course of a week but participants were not prevented from contributing to a discussion late i.e. they could contribute at any time to any forum during the entirety of the course. However, moderator input was limited mainly to the one week. It was also agreed that there would be no synchronous sessions for this course as this could introduce increased social/teaching presence to one of the groups in the scenario

where more participants in one group could attend than in another (typically it is difficult to find times so that everyone can participate in these webinars).

Here follows the path that a user would take over the course of a week with screenshot images to illustrate the type of activity that the user would be expected to engage in.

1. Participants log on to the home screen to see a dashboard (see figure 3.3) which shows progress through each of the modules that make up the course. The menu at the top of the screen provides access to the course forums, coursework, course feedback and technical requirements to run the web based learning management system.

Figure 3.3 : Dashboard

The screenshot shows the British Council dashboard. At the top, there is a navigation bar with the British Council logo and links for Forums, Modules, My Transcripts, Technical requirements, and Survey. A search bar is also present. Below the navigation bar is a large video player showing a woman in a red vest standing in front of a chalkboard. The chalkboard has writing on it, including "Monday 21", "WRITING COMPOSITION", and "It was a Monday morning I came with birthday cake". Below the video player is a "Continue" button. To the right of the video player is a "Latest News" section with a welcome message for week 2.

Title	Progress	Last Viewed
Unit 3 - Differentiation	<div><div></div></div>	03/05/2017

Latest News

Welcome to week 2 - Don't be shy. Engage in forum discussions from day 1. Your ideas and opinions are just as important and valuable as anyone's. Cristiana, Teo and Chris

2. Participants would then select the current module (e.g. Unit 3 - Differentiation in this case) and work through the interactive exercises, reading texts, video etc. (see figure 3.4 and 3.5). As mentioned above, participants had one week to work through this content at their own pace.

Figure 3.4 : Static content (video and text)

BRITISH COUNCIL Introduction to special educational needs (SEN) – Unit 3 TeachingEnglish

2/21 < > Not Completed

Differentiation 1

It's possible to include all learners by differentiating the work you give them. The aim with differentiation is to:

- provide access to learning for all learners
- provide successful experiences
- motivate and build self-esteem and confidence for learning.

Think about what you understand by differentiation, and then watch the video.

00:07 00:49

Transcript

Figure 3.5 : Static content (interactive exercise - matching)

BRITISH COUNCIL Introduction to special educational needs (SEN) – Unit 3 TeachingEnglish

5/21 < > Not Completed

Differentiation 4

Look at the two texts, A and B. Which text:

4 items remaining

uses gerunds and connectors creates sentences where the learner has to infer information

makes information clear and explicit uses short sentences only

Text A Text B

Finish Try Again

3. At some point during the week, participants were required to contribute to the course discussion forum (figure 3.6). Some participants preferred to work through the static content before contributing to the dynamic content of the course (this appeared to be the case particularly for group B), while others began to contribute as they were still working through the static content. Although there is criticism of this approach (see Chapter 2.36), learners were required to participate in the discussion activities to 'pass' the course but were not explicitly graded for their contributions.

Figure 3.6 : Dynamic content

BRITISH COUNCIL

Forums Modules My Transcripts Technical requirements Survey

Search...

Applying special educational needs practices

View Forum Discussions Back To Forums List

Cristiana Osan
02/05/2017 @ 20:23
1 62 252 Reply

Module 2 - DYS - Unit 3 (GrA)

Hi all.

After having completed the 3 units of the module, read the case study attached to this post and then answer the following:

- Can you identify any problems with this teacher's approach to the situation?
- Is there anything that you've read in this module (or elsewhere) that helps you understand the situation?
- What advice would you give to Zoe's teacher?

Carlos Ortiz

Dear Cristiana and colleagues. I think the teacher hasn't done any special approach to Zoe's problem. from what I have read in this module, it seems to me she has got dyslexia, as she is very good at other activities but writing, perhaps Zoe's teacher should plan some activities for her alone and probably using the colors strategy will help her to organise sentences better. It's also a good idea to talk to her, her parents and the director of the school to try and find a solution to help her. Instead of advising her to do some reading with her parents, h... should try and spend a few minutes with her to help her improve her reading there in school.

Help

3.7 Course participant profile

As this was a course with a global audience there is no common geographical, socio-cultural or educational context to describe. The participants came from a wide range of countries (see table 3.2). In terms of where the teachers were teaching, the bias is heavily towards Europe as a region (see table 3.2). 14% of participants are expatriate teachers, and this reflects the nature of the ELT industry, where private language schools often recruit from abroad. The participants worked in both private and public schools teaching a range of group size, for example one participant was working with individual private students, while others had class sizes of >30. One participant had a managerial role but was still required to teach.

Generally speaking, most of the teachers were highly motivated in terms of their attitude to teaching and their desire to develop professionally. The high level of motivation and inclination towards self-directed learning is certainly not the case for all teachers globally. In the 'Introduction forum' teachers discussed their various motivations for enrolling on the course and these included comments that referred to the specific content of the course i.e. SEN, with one comment referring to improving their English language competence.

Table 3.2 : Country participant is currently working in / different country of birth (where known)

Group A	Group B
Peru	Panama
Myanmar	Russia
India	Turkey
UAE	India
Turkey	Turkey
Netherlands	Australia
Tunisia	Spain / ?
Tunisia / UK	Myanmar
Ukraine	Ukraine
Finland	Azerbaijan
Colombia	Tanzania
France / US	Italy
Pakistan	Vietnam
Hong Kong / UK	Malaysia
Greece	Brazil
Italy	Saudi Arabia / ?
Greece	Afghanistan
Turkey	Mexico

Table 3.3 : Participants teaching location by geographical region

Region	Group A	Group B
Asia	3	4
Europe	10	6
Africa	1	1
Americas	3	3
Australasia	0	1
Middle East	1	3

The following table (3.4) gives mean and actual figures for the various teacher characteristics which were accounted for when allocating participants to the two different groups (see Chapter 4.3 for more details on sampling). The relatively high ratio of female teachers when compared to male teachers is not uncommon in English Language Teaching and teaching more widely (see, for example, OECD stat 2015 figures⁴). More uniquely, these were very well qualified teachers with a high mean for number of years spent in the classroom. Appendix 2 provides a table of individual teacher details and qualifications.

Table 3.4 : Participant characteristics

Group (s)	Number of Male CPs	No previous online experience	Age (average)	Number of native speakers	Years exp. teaching	Without qualifications	Highly qualified ⁵
A	3 (17%)	2 (11%)	44.6	3 (17%)	14.27	1	11
B	4	2 (11%)	43.27	3 (17%)	13.11	2	8

3.9 Moderator profile

As with the course participants, British Council e-moderators are based in a number of different countries (approximately half are non-native speakers of English). They also have a wide range of educational backgrounds and work experience. The following online profile gives details of the course moderator who was involved in this study.

I graduated from the Faculty of Letters (English-French) in Cluj-Napoca, Romania in 1997. In the following year I did my MA in Francophone literatures, still here, in Cluj, and I started studying teatrology. Then, in 1999 I got a scholarship from the Faculty of Letters in Geneva,

⁴ https://stats.oecd.org/Index.aspx?DataSetCode=EAG_PERS_SHARE_AGE

⁵ This is based on evidence of a graduate or post graduate type qualification.

Switzerland, and I got a second MA in Literature and Aesthetics. From 1999 to 2012 I worked as a teacher in a bilingual (Romanian - English) high school in Cluj-Napoca, Romania.

I've also been working as a teacher trainer at British Council Cluj and that is an activity that has taught me that I enjoy working with adults as well and that I love team work (I have worked with one or two other trainers). In the last 6 years I have been very much involved in online courses and exchanging ideas and experiences with other teachers worldwide has proved to be extremely rewarding. This very positive experience made me decide to become a freelance teacher trainer.

In 2015 I completed the first two DELTA modules and I am currently working on Module 3.

The British Council requires that all moderators have undertaken an initial in-house e-moderating course called *E-moderator Essentials* and are then mentored by a more experienced tutor for their initial 'live' run of a course. Moderators are also inducted into a learning and performance management system which includes annual 'observations' of their moderating with post observation feedback and discussion. See Appendix 3 for a detailed description of the moderators main duties as specified in a Moderator Role Profile (RP).

Chapter Four Methodology

4.1 Introduction

This chapter begins by outlining the epistemological orientation of this mixed methods study and detailing the approach taken for data collection and analysis. The research questions found in Chapter One are restated to remind the reader of the purpose of the study in relation to the methodological approach. The next sections concern the sampling method and process for placing participants in groups. This is followed by a detailed description of the study design, the ethical guidelines that were adhered to and the processes for data collection. The last section looks at how the data were analysed with a concluding discussion on the issues that arose for this study.

4.2 Epistemological orientation and methods

Positivism is predicated on the belief that there is an objective reality 'out there' which is independent of the observer and can be explored, measured and described. It is a scientific approach where systematic observation and investigation leads to the knowing of facts, which can later be generalised to a wider population (the specificity of context is less of a concern). Variables are to be controlled as far as possible and the observer and the observed (the object) are separate and distinct. In contrast, naturalistic approaches (for example interpretivism), see reality (i.e. truth/knowledge) not as an accessible external entity, but as multiple and constructed by the observer(s). Unlike, positivistic approaches, the knower and the known are inseparable and mutually impact each other. Instead of variables controlled (e.g. in this study see participants' characteristics), there is description of factors with possible influence accounted for. Specificity of context is more of a concern and the potential generalisation of findings, though not ruled out, is de-emphasised (Cohen et al, 2011 and Sarantakos, 2005).

Positivistic approaches tend to result in numerical data, whereas naturalistic lean towards the non-numeric. Community of Inquiry framework researchers have commented on the 'pseudo quantitative' nature of coding as it results in data that can be counted and therefore gives the appearance of being more objective than it is (e.g. Rourke and Anderson, 2004). For example, in this study, the numerical data derived from the coding process is used to indicate overall levels of cognitive presence in two groups that deploy two different teaching designs (see Chapter 4.4). While data that can be quantified (i.e. number of occurrences of a cognitive phase) is derived from the transcript analysis, this is still a qualitative, interpretive study. The coders are essentially attempting to interpret an educational experience, via other writers previous interpretations (i.e. the pre-existing analytical framework).

Research designs are generally intended to test or to generate a theory. The design here is set to test a hypothesis (or rather, the validity of a framework) and is fixed, but not in the purely positivistic manner of a scientific experiment. This study uses a content analysis research design (see Henri, 1992) achieved through the *a priori* coding of online discussions. From an epistemological viewpoint, conducting qualitative research using an analytical framework to

code discussion transcripts is not unproblematic. For example, are the inferences drawn from the application of the framework valid? i.e. can we trust that this reflects the reality of the educational experience. Meyer (2004) notes that analysis of a transcript through a framework enforces on the researcher that framework's 'point of-view and values'. Furthermore, Meyer (2004) warns that the application of a framework might be too narrow a lens or filter (you only see what the framework allows you to see). These concerns are not unique to this study however and writers have commented (e.g. see Park, 2009) that coding itself is a valuable process that provides insight into what is otherwise difficult to interpret.

4.3 Research questions

The first research question below is centred around a critique of the Community of Inquiry framework that was identified in the literature review (Chapter 2). The second research question is obtained from the Community of Inquiry framework author's response to that criticism (Garrison et al, 2001) i.e. namely, that the problem was not with the framework itself, but the design, organisation, facilitation and instruction (i.e. teaching presence) found within a Community of Inquiry.

a) Do learners studying a wholly online course engage in the higher order thinking within and through discussion that the Community of Inquiry framework posits?

b) Do specifically designed online learning activities with particular types of facilitation and direction (teaching presence) move participants more effectively through the stages of the Practical Inquiry Model?

As described previously in Chapter 2, the four phases of the Practical Inquiry Model are 'triggering' (e.g. sense of puzzlement, curiosity), 'exploration' (e.g. information exchange, opinion), 'integration' (e.g. connecting the ideas) and 'resolution' (e.g. applying those ideas).

4.4 Sampling

The course participants were selected on a first come first served basis in response to an advert on a British Council MOOC Alumni Facebook page (see Chapter 3.2 for description of British Council MOOCs). This is a closed community for those teachers (n. 11683 as of 21/07/17) that wanted to continue networking after the original MOOC had come to an end. A call for participants was sent out to the page detailing the free course (see Chapter 3.6 for description of course) and the purpose of the research i.e. examining participation and engagement in an online course for teachers. Potential participants were asked to apply by completing and signing a form (see appendix 4) giving permission for their online data to be used for research purposes. On receipt of the form a place on the course was awarded.

The participants were initially placed into alternate groups according to the chronological order of application i.e. the first applicant was placed in Group A, the second applicant was placed in Group B. Once these groups had been filled (18 participants per group) an additional two

groups (C and D) were opened. Participants were assigned to groups using the same method for Group A and B. Due to budget limitations only two groups could be moderated so it was decided that groups A and B would be the focus of this study. Groups C and D were still delivered but without moderator support (this had previously been agreed with the participants in these groups). One transcript from Group D was used for coding training purposes (see Chapter 4.8 below).

All participants were sent a survey asking for biographical data/characteristics that had the potential to impact the study (see Chapter 3.7). The characteristic that was seen to have the highest potential impact on this study was whether the participant was a native speaker of English as this could affect ability and confidence to communicate in writing. It was also important to ensure there was a reasonable gender balance across the groups i.e. ensuring that all the male participants were not in one group (there is a body of research exploring whether male and female students experience and respond to online learning in different ways e.g. see Savicki, Lingenfelter, & Kelley, 1996). Other characteristics that were taken into account were previous online course experience, and whether the participant had a teaching qualification. Participants were then assigned to new groups to ensure that there was a reasonable spread of these biographical elements (see table 2.3 in Chapter 3.8 for the final result of this reallocation).

As illustrated above, the sampling method deployed was one of volunteer, opportunity or convenience sampling i.e. non random purposive sampling. This method was deployed for reasons of convenience but also efficacy. The researcher felt that drawing course participants from a group of teachers who had joined a social media network for MOOC Alumni would obtain a certain level of engagement with the course content. This was to avoid an identified risk that research courses would run but result in little or no data as teachers had not participated fully (for example, forum participation was initially very low in Group C). While this means that generalising the findings and conclusion to a wider teaching population is problematic, the purpose of the study i.e. to confirm or challenge the critique of the Community of Inquiry framework, means that the representative nature of each participant is a less critical requirement i.e. the criticism is levelled at all online courses regardless of the profile/motivation of participant. Further, some comparison of group A and B is still valid as the participants were drawn from the same population and therefore likely to have similar profiles. It is difficult to compare this sample with a wider, global, English teacher population as the profile of the latter will vary significantly both between and within individual countries. From the biographical data elicited, the sample likely over represents highly motivated, native speaker, highly qualified teachers and underrepresents younger, less motivated, less qualified teachers working in public education systems (see Chapter 3.8 for description of teacher profile). The sample is arguably representative of the type of teacher that regularly participates in MOOCs and other free online education opportunities (although four participants stated this was their first online course, even though they had been drawn from a MOOC alumni Facebook group).

4.5 Study Design

As discussed in Chapter 2.4, the following tasks (see table 4.1) were used for this study.

Table 4.1 : Task type and description

Group	Task	Description
A	Debate (See example 4.1)	The debate task introduced a motion for which 50% of the participants were directly assigned to be for, and 50% assigned to be against (regardless of their personal views). The motion was explicitly linked to the module's topic. Each debate concluded with a prompt or prompts that asked participants to decide who had won the debate and/or to report on whether their beliefs or assumptions had changed as a result of the debate. Debate tasks were designed specifically for this study by the researcher.
A	Case Study (See example 4.2)	The Case Study task provided participants with a case that gave a teacher's and a learner's perspective on a classroom scenario. The information was intentionally limited so as to allow participants the freedom to explore the possibilities of the situation. The 'mechanism' of the task was to then prompt participants towards creating a solution to 'solve' the problems that they had previously identified in the situation. Final prompts attempted to push participants towards 'resolution', for example, defending the solutions created, or summarising what had been gained from the discussion. Case study tasks were adapted from previous assessment tasks for this course, but they had never been used in a discussion context before.
A	Practical Inquiry Model (See example 4.3)	Practical Inquiry Model tasks mirror the phases of the Practical Inquiry Model. The first prompts asked participants to explore a certain area of the modules content (generally a problem that might have surfaced), the second set attempted to guide participants towards integrating the ideas from the previous prompt/discussion and the last set move them to 'resolution'. The Practical Inquiry Model questions were designed specifically for the study by the researcher.
B	Open Discussion (See example 4.4)	Open discussion questions were not designed specifically for this study and are typical of the type of prompts that are deployed on British Council online teacher development courses (and teacher professional development courses more widely). They engage with the content of the module but have no 'mechanism' or implicit/explicit intent to move participants towards higher cognitive phases of cognition. In other words, they do not preclude higher level cognitive phases but equally they do not guide participants to do this. The complete 'openness' of the discussion will be impacted by the initial prompts, but participants are less constrained by a task as in the three designs above.

A	Open Discussion with practical application (See example 4.5)	This task was used on just one occasion with Group A. The purpose was to explore whether teachers would move from Open Discussion to applying ideas in the classroom and then reporting back to the group for further discussion. The Open Discussion part to the task was not designed specifically for this study, while the practical application part was designed by the researcher.
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The following table (4.2) shows the course modules, weeks and order of task designs used for Group A and B. The course started on Tuesday 18th July 2017 and each module ran for one week. The numbers in brackets denote the number of each type of task design deployed for group A and B.

Table 4.2 : Overall course design

Week	Group A	Group B
0 Getting started	Introductions and open discussion (not part of study)	Introductions and open discussion (not part of study)
1 Understanding SEN	Debate (1)	Open discussion (1)
2 Dyslexia	Case Study (1)	Open discussion (2)
3 ADHD	Practical Inquiry Model (1)	Open discussion (3)
4 Dyspraxia	Debate (2)	Open discussion (4)
5 Visual, hearing and physical impairment	Case Study (2)	Open discussion (5)
6 Gifted and talented learners	Open Discussion (1)	Open discussion (6)
7 Inclusive assessment approaches	Open Discussion + practical application (1)	Open discussion (7)
8 Autism spectrum disorder	Case Study (3)	Open discussion (8)
9 Social, emotional and behavioural difficulties	Open discussion (2)	Open discussion (9)
10 Speech and language	Debate (3)	Open discussion (10)
11 Multicultural influences	Practical Inquiry Model (2)	Practical Inquiry Model (1)

Example 4.1 to 4.5 illustrates each task type. Weekdays are provided to show when the prompts were provided (all initial task prompts were provided on a Tuesday but subsequent prompts were delivered on different week days). The phases of the Practical Inquiry Model are also shown when the prompts were explicitly designed to elicit one, two or three of the different phases (i.e. exploration, integration, resolution)

Example 4.1 : Debate

Moderator Post 1: [Tuesday - exploration/integration]

Over the last few decades more and more children have been diagnosed as having Special Educational Needs. Is it really the case that the numbers of children with SEN have been increasing or are we just labelling more? If you label somebody as something then in all likelihood they will become that thing.

All labels are negative and we should ban the use of them.

For the motion (9 participants i.e. 50% of the participants spoke for the motion)

Against the motion (9 participants i.e. 50% of the participants spoke against the motion)

To back up your arguments please draw on the course content, other content you may find on the web, and your own personal experience.

Moderator Post 2 : [Sunday - resolution]

In what ways, if any, were your existing assumptions challenged or changed by the debate?

Example 4.2: Case Study

Moderator Post 1: [Tuesday - exploration/integration] Read the case study and then answer the following

Can you identify any problems with this teacher's approach to the situation? Is there anything that you've read in this module (or elsewhere) that helps you understand the situation? What advice would you give to Zoe's teacher?

Moderator Post 2: [Sunday - resolution] Zoe's teacher does not agree with your advice (he was quite angry!). Can you justify your position based on a real example from your own experience, or other sources?

Zoe's teacher says:

"Zoe is new to my class. In many respects she seems very bright and joins in class discussions and games with lots of enthusiasm. The problem is her concentration in class and

TRYING to get her to hand in written work. She makes excuses about forgetting her homework or not being able to see the board very well. In fact, when all the other kids are taking notes off the board I often seen her daydreaming, staring into space or just looking out of the window! Or worse still, she distracts the students she's sitting near. When I finally managed to see some of her written work I was really shocked. I would never have guessed that it came from her because it was such a low standard. The spelling was very poor and the writing didn't really make sense. She doesn't seem to have any idea about punctuation. Perhaps her previous school didn't focus so much on writing but I think it's crucial for language learning. I've been keeping her back after class and asked her to do extra reading with her parents at home, but I have no idea if that's actually happening. She says it is but I have my doubts."

Zoe says:

"I really like learning English and I know quite a lot of English words. We play games in the English class which are great and we act out scenes and pretend to be English. I like singing songs in English. The other day we played 'you're the teacher' and I had to correct others mistakes when they were speaking. I loved that. But there are other things we do that I hate. Like when we have to copy new words from the board. I always get them wrong and have to keep looking back at the board. It takes so long. The same thing happens when I have to write things down. Like story writing, I have so many ideas but it all gets jumbled up. The words don't come out right even though I spend ages doing it. We're not even allowed to use spellcheck for some reason. I don't want the teacher or my friends to see it because I'm embarrassed. All the others kids work is up on the walls but not mine yet. I guess it's because I'm new. Next week it's my turn to read out a story in class - I'm dreading that."

Example 4.3: Practical Inquiry Model task

There are three parts to the discussion this week. I will post a new question on Tuesday (today) and another on Saturday and Sunday. Please log in to answer the question and read/reply to others responses.

Moderator Post 1 [Tuesday - exploration]

Question 1 : Do you have any personal experience of ADHD (in a classroom or outside of it)? If you don't can you find anything on the web and summarize to share with others? What problems did ADHD seem to cause?

Moderator Post 2 [Saturday - integration]

Question 2: Look at the previous discussion to question 1. Are there any problems that you can come up with a solution for?

Moderator Post 3 [Sunday - resolution]

Question 3: Look at all of the problems and potential solutions and summarise what you have taken from this discussion.

Example 4.4: Open Discussion

[Tuesday]

Every class is diverse because it's made up of unique individuals. Our learners have different learning preferences, skills, gender and racial balance and so on. In addition to these differences, some learners might have special educational needs or perhaps they are particularly gifted learners.

How are your learners different? How are they the same?

Mention some of your classroom practices meant to make sure you do not exclude any learners.

Example 4.5: Open Discussion + Practical application

[Tuesday]

What problems do learners with SEN have with assessment of learning? What are the potential problems with introducing assessment for learning? If you are teaching a class, experiment with an assessment approach this week and then report back to the group on how it went. If you are not currently teaching you can read others contributions and summarize the groups findings.

Over the course of 13 weeks (see table 4.2), group A responded to Debate and Case Study type tasks three times and Practical Inquiry Model tasks two times (Debate 1/2/3, Case Study 1/2/3 and Practical Inquiry Model 1/2). Group B responded to Open Discussion tasks except for the final module where they were given a Practical Inquiry Model task (the same task as given to Group A). In week 9 Group A and B were given identical discussion prompts i.e. standard Open Discussion. In week 7 Group A was given an Open Discussion task but with a practical element: the participants were asked to take course content and apply in the class and then report back on the results.

This design allowed for an analysis of the following to answer research question a) in Chapter 4.2 above.

- i) levels of cognitive presence in groups A and B.

This design also allowed for a comparison between the levels of cognitive presence found when different types of teaching presence were deployed to address research question b) in Chapter 4.2 above.

- i) differences in specific levels of cognitive presence (i.e. the four Practical Inquiry Model phases of triggering, exploration, integration and resolution) in Groups A and B

- ii) differences in specific levels of cognitive presence over time in Groups A and B i.e. does this increase/decrease/remain the same/show no pattern?

- iii) differences in specific levels of cognitive presence when deploying Case Study, Debate, Practical Inquiry Model or Open Discussion task design

4.51 Moderator input

One moderator (see profile and role in Chapter 3.9) facilitated both group A and group B. As far as was feasible, the moderator was requested to spend the same amount of time facilitating and responding to both groups (see table 4.3 for number of posts by the moderator per module). Outside of the task design the moderator also attempted to provide the same 'quality' of facilitation to both groups. This was mainly in the form of answering questions related to the course, encouraging the group to respond and summarising the discussion at the end of the week. The researcher provided both tasks for group A and B on a weekly basis and the moderator issued a calendar at the start of the course which detailed when each module started and finished. The intended design was that the participants studied the course in lock step so the forum discussions had a clearly delineated start and end (Tuesday to Tuesday). For the most part this was adhered to by the course participants, though the timing of the posts in the two groups did differ (see Chapter 5). The moderator also responded to participants emails, but this was primarily in the area of technical support or questions around participation and assessment. The researcher and moderator met on a weekly basis to discuss the progress of the course and any problems that had arisen (again, these were mostly of a technical nature).

Table 4.3 : Moderator responses according to module and group (excluding initial task posts)

Forum	Group A	Group B
Module 1: Understanding SEN	5	6
Module 2: Dyslexia	7	7
Module 3: ADHD	8	8
Module 4: Dyspraxia	7	7
Module 5: Visual, hearing and physical impairment	7	7
Module 6: Gifted and talented learners	6	6
Module 7: Inclusive Assessment approaches	10	10
Module 8: Autism Spectrum Disorder	7	8
Module 9: Social Emotional and Behavioural Difficulties	7	7
Module 10: Speech and Language	5	5
Module 11: Multi-cultural Influences	7	7

4.52 Assessment

Before the course commenced the course participants were informed that a 'pass' required completing 100 percent of the static course content and achieving a score in excess of 70% (see Chapter 3.6). The use of a minimum score is an institutional strategy which ensures that participants cannot just click through the content, which in terms of Learning Management System reporting, can appear equal to 'completed'. Using this strategy, participants are required to engage with each course 'page' and interactive exercises and score above 70%. If they do not achieve this then they have not 'passed' the course. Additionally, participants were informed that they needed to contribute to all forum discussions with a personal contribution and at least one reply (as we have seen in Chapter 2 there are criticisms of this approach, but as with the sampling choice it was deemed necessary to ensure sufficient data for the study). Lastly, a two part assignment was set (see appendix 5). Part one was sent to participants in week 4 to allow for completion during the course. Part two was sent to participants in the final week of the course with a two week deadline. Part one had a practical focus (i.e. take an aspect of the course and use in class and then reflect on the outcomes). Part two was a case study and designed to elicit (at least in part) higher order thinking skills. While the assessment was an integral part of the course, it was not part of the data collection and analysis for the current study.

4.6 Ethics

The research enquiry was approved by the University of Bath ethics board in 2015. Guidelines for online data access as per British Educational Research Association guidelines were followed. Before the course commenced all participants provided signed and dated permission for their online course data to be used for research purposes (i.e. informed consent should be mandatory for collection of online data e.g. Bakardjieva & Feenberg, 2001). Further, all participants were made aware that they could withdraw this permission at any stage and that

their data would then be omitted from the study. All data was anonymised before coding work began with numbers used to represent teachers' names e.g. Participant 1, 2, 3 etc.

4.7 Data collection

Data collection was via the Learning Management System with participants informed before the research began that this would be the case. The forum data was copied into Microsoft Word and later imported into Atlas.ti (software for analysis of qualitative data) to enable easier analysis and manipulation of data. See Chapter 5 for a quantitative description of the forum data (e.g. number of words) and Appendices 6 and 7 for an example transcript from Group A and Group B (20 additional transcripts are available on request).

4.8 Data analysis

This section will look first at the choice of analytical framework for this study, the coding unit that was used and the overall coding process.

4.8.1 Analytical Framework

Various analytical frameworks have been deployed to research online discussion through content analysis (see Henri 1992; Gunawardena, Lowe & Anderson 1997; Garrison et al. 2001). The most commonly deployed in Community of Inquiry research is the Garrison et al. (2001) analytical framework (see figure 2.3 in Chapter 2.33) or a minimally adapted version of the same (see figure 4.1 Park, 2009 and figure 4.2 Pawan et al., 2003).

Figure 4.1 : Analytical framework for cognitive presence, Park (2009)

Phase of cognitive presence	Subcategories
1. Triggering event	Clarification Restating
2. Exploration	Agreement: agreement without substantiation Information sharing: stating a fact, policy or rule; citing a source Divergence: disagreement Leap to Conclusion: no relationship to previous discussion, not logical Personal Narration: story, relating an incident, describing practices at their job Opinion: belief or judgement, personal view, attitude based on grounds insufficient to conclude factual
3. Integration	Building on: augmenting a point made by self or by another earlier Creating Solution: novel conclusion Justified hypothesis: a tentative assumption made in order to draw out and test its logical consequence to prove or show to be just, right or reasonable; coming to a conclusion predicted by ongoing discussion but supporting with relevant reason Supported divergence: disagreement with reason stated Supported agreement: agreement with reason stated
4. Resolution	Wrap-up: concluding; summarizing Thought experiment: questioning 'what if?' or 'what do you think about?' Apply, test and defend: any of the three but not retrospective narrative; must be an application of new thought initiated by the discussion present.

Figure 4.2 : Analytical framework for Cognitive Presence, Pawan et al. (2003)

Descriptor	Indicators	Sociocognitive processes
Phase 1	Trigger events (evocative)	
	1.1 Recognizing the problem	1.1.1 Presenting background information that culminates in a question
	1.2 Sense of puzzlement	1.2.1 Asking questions 1.2.2 Messages that take discussion in new direction
Phase 2	Exploration (Inquisitive)	
	2.1 Divergence -- within the online Community	2.1.1 Unsubstantiated contradiction of previous ideas
	2.2 Information exchange	2.2.1 Personal narratives/descriptions/facts (not used as evidence to support a conclusion)
	2.3 Suggestions for consideration	2.3.1 Author explicitly characterizes message as exploration; e.g., "Does that seem about right? Or "am I way off the mark?"
	2.4 Brainstorming	2.4.1 Adds to established points but does not systematically defend/justify/develop addition
	2.5 Leaps to conclusion	2.5.1 Offers unsupported opinions
Phase 3	Integration (Tentative)	
	3.1 Convergence	3.1.1 Reference to previous message followed by substantiated agreement; e.g., "I agree because..."
		3.1.2 Building on, adding to others' ideas
	3.2 Convergence (tentative solutions)	3.2.1 Justified, developed, defensible, yet tentative hypotheses
	3.3 Connecting ideas, synthesis	3.3.1 Integrating information from various sources -- textbook, articles, personal experience
	3.4 Creating solutions	3.4.1 Explicit characterization of message as a solution by participant
Phase 4	Resolution (committed)	
	4.1 Vicarious application to real word	4.1.1 None
	4.2 Testing solutions	4.2.1 Coded
	4.3 Defending solutions	

Differences between the two analytical frameworks above are relatively minor and occur at the sub element rather than the cognitive phase. For example, Personal narration is a distinct sub element for Park (2009), whereas for Pawan et al. (2003) this was a descriptor for Information exchange. Broadly though, these remain true to the original framework provided by Garrison et al. (2001). Other writers have adapted more significantly, for example, as noted earlier (Chapter 2.34), Redmond (2014) added reflection to the Community of Inquiry framework as an explicit cognitive presence indicator (see figure 4.3).

Figure 4.3 : Analytical framework changes for ‘reflection’ as per Redmond (2014)

Phase	Indicators	Socio-cognitive processes
Resolution / Application	Vicarious or real world application of solutions/ideas	Providing examples of how problems were solved Results of application
	Defending solutions	Defending why a problem was solved in a specific manner
	Reflection	Reflecting on learning content and outcomes Reflecting on learning processes

Meyer (2004) notes that the framework you deploy will impact what you are likely to 'discover'. For example, in contrast with much of the Community of Inquiry research, Redmond (2014) finds a significant percentage of posts (33%) at the resolution level. However all of this is classified as the author's newly added reflection indicators i.e. reflection on learning outcomes and reflection on learning processes. In contrast, if the original Garrison et al. (2001) indicators had been used for the Redmond (2014) study then the discussions would have been classified as achieving 0% resolution. Although reflection is an important focus for teacher development courses (see Chapter 6.3.3) the inclusion of these indicators would make it difficult to address the fundamental critique of the Community of Inquiry model i.e. that a lack of higher order thinking was evidenced through analysis of the original framework's indicators.

For this study the coders (see Chapter 4.7.4 below) used the simplified framework deployed by Park (2009) for two reasons. Firstly, it is more accessible than the Garrison et al. (2001) framework, but still maps precisely to the latter without introducing new indicators. Given that the three coders were geographically dispersed, simplicity of framework was paramount. Garrison et al. (2006) argue that 'The coding scheme employed must be of sufficient detail to allow messages to be identified and coded.' Whilst Park's (2009) framework is slightly simplified in terms of wording, it still retains the level of detail found in the Garrison et al. (2001) original framework. Secondly Park (2009) has been used by other researchers, for example Darabi et al. (2011), who deployed a similar study design to the one used for this thesis (i.e. a combination of case study and differentiated discussion strategies e.g. roleplay, forced debate, structured and scaffolded). During coding the coders initially referred back to the original Garrison et al. (2001) framework when there was any ambiguity in applying a code. Switching between the two gave a more nuanced picture of the four phases of cognitive presence.

4.8.2 Level of analysis: coding unit

Different researchers have taken different approaches to the unit of analysis for coding. For example, Garrison et al. (2001) used a complete post (i.e. message) as the unit of analysis. Pawan et al. (2003) justified coding at the level of speech segment (i.e. smallest level of theme, function, speech act etc. within a message) because the discussion tasks they used had several questions and participants often answered all of these within one post. Similarly, Park (2009:146) coded according to each new "segment of a posting that differed from what preceded it on the basis of the action categories" (action categories here being the indicators found in the analysis framework). Park (2009) gives the example of a number of factual statements followed by a conclusion in one message. This would be coded twice, first for the factual statements and second for the conclusion. Through early analysis of this study's data it was clear that many posts contained more than one 'action category' meaning the approach taken by Park (2009) and Pawan et al. (2003) was the more appropriate for this research. Example 4.6 below shows how one message can move between different cognitive phases.

Example 4.6

Post/segment	Commentary
<p>Participant 15</p> <p><i>I have been reading more about dyslexia and measures recently put in place by different countries to help children with this condition to remain in main-stream schools. It occurred to me that the teacher possibly knows about dyslexia in theory, as he talks about Zoe's difficulties as though he may have read about it, but he may never have had to deal with a dyslexic child, so does not recognise the possibility when he sees it. Zoe obviously needs help and her teacher needs guidance so that she can benefit from the help she is entitled to.</i></p> <p><i>What is your view on this, Participant 19? You have come up against an uncaring administration in the case of one child. Without the explicit support of your hierarchy, how far do you think you could go in helping the little girl in question without causing problems?</i></p>	<p>Segment 1 Cognitive Phase : Integration Sub Element : Justified hypothesis</p> <p>Here the participant is integrating ideas from outside reading with the information given in the Case Study task. The 'hypothesis' is that the teacher in the case study knows about dyslexia in theory but has never seen it in practice.</p> <hr/> <p>Segment 2 Cognitive Phase : Triggering</p> <p>Here the participant responds to another participant with a trigger that could take the discussion in a new direction.</p>

4.8.3 Reliability and inter-rater reliability

Reliability in educational research is the aspiration to achieve consistency and stability. So in the case of this study, one message coded as one cognitive phase would be coded the same way repeatedly, regardless of who was doing the coding. However, as this is a qualitative study the aim is not for reliability in the quantitative, statistical sense. As noted with validity in Chapter 4.2 above, the reliability of naturalistic approaches is also seen as problematic. Even where an analytical framework is deployed as with this study, there is an inescapable process of interpretation. So rather than a positivist form of reliability, the aim is more in line with Lincoln & Guba (1985) i.e. "trustworthiness" and specifically within their proposed criteria, dependability.

With coding and content analysis, a common approach to increase consistency is to use more than one individual to code and then check whether these codes are aligned (i.e. what is sometimes referred to as inter-rater reliability). Different research in this area has tackled the issue of inter-rater reliability in various ways. Garrison et al. (2001) note that in some studies this has been an individual researcher bringing an independent and therefore more subjective analysis via the coding framework. Redmond (2014) took this approach but attempted to

increase reliability by coding and then re-coding several months later, achieving agreement (with herself) of 92%. Pawan et al. (2003) used two researchers to code simultaneously with initial training using a part of the original research data. Post training inter-rater agreement was 89% at which point some adaptations were made to the original framework of analysis (see figure 4.2), primarily due to aforementioned difference in level (or unit) of coding between their study and that of Garrison et al. (2001). After these changes final inter-rater agreement was 94%. Park (2009) used two coders (two research assistants working alongside the primary researcher) and noted issues with achieving inter-rater reliability (her research sought to replicate the methods deployed by the Garrison et al., 2001 study). Park (2009) reported a high degree of subjectivity when coding, and noted the influence of the primary researcher on the assistants to align their interpretation with her own. Garrison et al. (2006) recommend that a 'negotiated' coding is used to improve reliability. Akyol & Garrison (2011) when comparing online versus blended courses and levels of cognitive presence also used a negotiated coding approach with no difficulties reported. Richardson & Ice (2010) used four coders working with NVIVO qualitative software. Initial agreement was 71% but this increased to 100% after meeting to discuss discrepancies and achieve consensus.

As noted above, this is a qualitative study and so the true 'accuracy' of 100% inter-rater reliability is questionable. It is more reasonable to talk of overall consensus where divergence in opinion is discussed with a view to reaching a shared understanding and some form of tentative agreement. Given the issues identified above, this study used three coders (the researcher and two members from the same team currently employed at the British Council - see Chapter 4.84 below). There was an initial training period, followed by independent coding and culminating in a post coding discussion to achieve consensus i.e. negotiated coding as recommended in Garrison et al. (2006).

4.8.4 Coding : The coders and training period

Data was coded by three coders including the researcher and writer of this thesis. The two additional coders (e-learning consultants) were colleagues at the British Council with experience in online teacher development and some knowledge of the Community of Inquiry framework and its application in research (seminal texts were provided by the researcher to aid understanding prior to initial coding training). A hierarchical work relationship did exist between the researcher and the coders (see Park, 2009 and the potential influence of the primary researcher on assistant coders), but potential impact of this was lessened by the process which required coding independently and sharing results before the final negotiation stage (see Chapter 4.85).

Previous to coding the data for this study, there was an initial period of training as recommended by writers such as Rodriguez (2014). This was conducted using the Group D Module 3 transcript which was not the focus of this study (written permission had also been given for all of these participants' data to be analysed). See the following section for the process that was followed for both the training data and the final data for this study.

4.8.5 Coding : Process and results

A common strategy for process deployed by researchers (Pawan et al., 2003) is to begin by deciding if posts were on task (i.e. those related to cognitive presence) or off task. Others (e.g. Park, 2009) have coded all of the postings without this initial filter. Sadaf & Olesova (2017) began by dividing discussion transcripts into meaningful units, then classified these as one of the four phases and then established the frequency of these units for each phase. As with others they focused purely on cognitive presence indicators in the units, disregarding all 'other' messages. As the focus for this study is on cognitive presence the same approach was taken i.e. coders did not rate for other presences. As the total number of posts to code was manageable then the coders adopted the method of attempting to rate all postings, and classifying as 'other' where the message showed no cognitive presence indicator (see Chapter 5.2 for breakdown of cognitive/non-cognitive and moderator posts).

Codes were applied for the four cognitive phases (Triggering, Exploration, Integration and Resolution) and for the sub elements of Exploration, Integration and Resolution. Triggering sub elements were not assigned as Park (2009) only provides the sub elements of Clarification or Restating (see figure 4.1) and this was not felt to add further depth to the analysis. For the initial training, the three coders looked at one transcript independently and then came together for a one hour teleconference where each post/segment was looked at in turn and discussed (where there was immediate agreement there was limited discussion, where there was disagreement this was extended). This first training meeting achieved an initial inter-rater agreement of 85% and further discussion increased this to 100% agreement (Group D Module 3 transcript was a relatively simple transcript to code with a smaller number of short postings when compared to both Groups A and B).

The coders then went on to complete all of the coding for groups A and B with no further communication related to the task until a face to face meeting one month after the initial training period. For the final data for this study, inter-rater reliability was established at a face to face meeting that was held over three days and lasted approximately eighteen hours (see appendix 7 for results). Overall initial inter-rater agreement of 90.77% was achieved, and this increased to 99.54 after discussion and negotiation. Coding to one of the four cognitive phases was not overly problematic as the initial consensus of 90%+ would demonstrate. The following table (4.4) provides an example of each Cognitive Presence phase and respective sub element along with the rubric/descriptor provided by Park (2009) as used by the coders for rating decisions.

Table 4.4 : Examples of coding at cognitive phase and sub element

Cognitive phase	Sub element and Park (2009) descriptor	Example post/segment
Exploration	Opinion “belief or judgement, personal view, attitude based on grounds insufficient to conclude factual”	<i>I strongly believe that every child has his own strengths (as well as weaknesses). I think it can be noticed easily if you teach the same group for some time. The problem is to give enough support to develop the first ones. I mean, when you as a teacher have to show good exam results (no matter how many students with SEN there are in your class), to cope with the curriculum etc.</i>
	Leap to conclusion “no relationship to previous discussion, not logical”	<i>Nowadays , nearly most learners in the society need special education approaches due to various reasons . What are the advantages of negatively labelling them ? We , teachers have to create a suitable and flexible leaning enviroment for all learners.</i>
	Personal narration “story, relating an incident, describing practices at their job”	<i>I have students from ages 5 to 55, so there biggest difference is age and level of education. My beginners are very similiar whether they are 5 or 55. I try to start the lesson with similar questions 'How are you?' How is the weather? and depending and the age and level. What they are wearing? If we are covering they past I ask what they did over the weekend or Holiday. If we ar discussing the future I ask what their plans are for the weekend etc.</i>
	Agreement “agreement without substantiation”	<i>I have the same problem with you and what I do is really the same with you.</i>
	Divergence “disagreement”	<i>No codes for this sub element.</i>
	Information sharing “stating a fact, policy or rule; citing a source”	<i>Participant 4 , playdough is coloured clay that children can play safely with and form it the way they like in different shapes or letters</i>
Integration	Creating solution “novel conclusion”	<i>Her inattentiveness could be corrected by moving her to the front row, just in front of him. Zoe’s inability to hand work in on time could be helped with class reminders in the form of post-it notes or</i>

		<p><i>on the board, written in color (ex. Two days until assignment is due! Ask me if you need help budgeting your time). I, as a teacher, would give her extra time to complete her work. Zoe should be given information and tasks in small amounts because of her working memory issues. Using visuals along with words and phrases is really helpful, too.</i></p> <p><i>Allowing Zoe to record the lesson on a phone would help her comprehension and memory. She could record her ideas for her writing, too. The more she is allowed to incorporate her auditory skills, the better. And she should be allowed to use spellcheck. Building her confidence is crucial to her success</i></p>
	Supported agreement “agreement with reason stated”	<p><i>Yes, Participant 9 you are right. It's really difficult to say directly to the parents that their child has a learning disorder. You become their 'enemy'. " Yes, but he is so smart, " they reply, and the truth is that we are not the experts to diagnose officially such a condition. Every time I was pretty much sure or suspicious about a relevant situation I addressed the parents cautiously, I was very careful of the words I was going to use, emphasising on the child's strengths and intelligence and at the same time describing his/her difficulties in learning. I ended up advising them to consult a specialist, reassuring them that their child's life would be a lot easier after that.</i></p>
	Supported divergence “disagreement with reason stated”	<p><i>I appreciate what you say, Participant 9. But we must beware of taking on too much when we are not sufficiently trained. Just think, in your class there is a child who doesn't follow instructions. Why? Is he hard of hearing and doesn't hear your instructions? Does he have problems with working memory so is unable to remember all that he has been asked to do? Does he have language problems so that he does not understand what he is supposed to do? This is just one example of something you may notice but you are unable to say why.</i></p> <p><i>Do you begin a course of action which may be the wrong one, with the danger that you may upset a child who is already fragile, or do you expect the school system to arrange for whatever diagnosis</i></p>

		<p><i>and help is needed? In some conditions, if you provide the wrong sort of "help" you may make things worse. That is why I say that teachers should not be considered responsible for identifying special needs children and should certainly not be held accountable for this duty. Teachers who work in a school are part of a team, and the school itself is part of a system. The system needs to be organised to help each child in the best way possible. In case of one teacher's failure to notice a potential SEN child, the finger should not be pointed at him, but at the system which has failed both the child and the teacher. Someone talks in their post about teachers being in the front line, but soldiers in the front line will not last long without the logistics and organisation that happens behind the lines!</i></p>
	<p>Building on “augmenting a point made by self or by another earlier”</p>	<p><i>Hi Participant 8, your point "that when members of same culture group get together they tend to speak in their own language which may be socially inappropriate" resonated with me. One of the biggest difficulties that we had when teaching English to women from different cultural, ethnic and linguistic backgrounds was that they did have a tendency to gather together with people from the same background and all speak their L1. This was understandable, but it led to a lack of cross cultural communication....</i></p>
	<p>Justified hypothesis “a tentative assumption made in order to draw out and test its logical consequence to prove or show to be just, right or reasonable; coming to a conclusion predicted by ongoing discussion but supporting with relevant reason”</p>	<p><i>It is definitely better to have students participate in team games together. Yes, this might provide a challenge for the student with dyspraxia as well as for the other students. However, in life they will have to work/play together with all kinds of people who have different strengths and weaknesses. Learning early is the best. What the teacher can do is to tell the students what dyspraxia is, how they can help their classmate and any issues that might arise...</i></p>
Resolution	<p>Wrap up “concluding; summarizing”</p>	<p><i>I have taken quite a lot from this discussion. In this I have learned that: students with ADHD might also get annoyed by their own behaviour but now know</i></p>

		<p><i>how to adjust it/change it. The adjustments need to start with YOU, not with your student. It is also important to see the student behind the ADHD. They are more than just their ADHD. Try to focus on what they can do and try to set clear rules/boundaries for things they have issues with. Work together with the student to see if you can solve some of their problem areas by adjusting your own teaching and way of responding.</i></p> <p><i>I will definitely try to look at this from a different perspective from now on. Also: one of my adult students has ADHD and her daughter as ADD. I talked with her about this and she recognised so much. So I can use what I have learned and put it in practice with her. As she is an adult she can let me know somewhat easier what works and what doesn't so that is good.</i></p>
	<p>Apply, test and defend</p> <p>“any of the three but not retrospective narrative; must be an application of new thought initiated by the discussion present.”</p>	<p><i>I notice that many of us have been blithely recommending getting help from people outside the school, speech therapists and presumably child psychologists etc. Last night I tried to find how easy that is. I know that within the school system in my country, help is theoretically there, but you may never see it. The same with specialists within the health service. They exist and are overwhelmed with work so you have to wait a long time before you can get an appointment, if ever. Then in the private sector in the professional directories open to the public, I could only find about ten speech therapists to cover the whole of the country which has a population of over 11 million people, with a very high percentage of under 25 years old - nearly 40%. There is not one I could find in the region of my city with population of about 700,000. So unless people can afford to pay for private help and are prepared to travel, I fear that for the moment we must count on our teachers to do what they can to help. There are a number of very new associations who are beginning to raise consciousness as regards special needs children, but their resources are few.</i></p> <p><i>Teachers have a very heavy workload here, and few of the technical resources we keep referring to. However, in the case of dyslexia, we as teachers are</i></p>

		<i>bound to come across several children (one in ten of the population) who are at a great disadvantage, so we should all try to learn what we can in order to do our share. We should collaborate with our colleagues and get help from parents and local people...</i>
	Thought experiment “questioning ‘what if?’ or ‘what do you think about?’”	<i>...Another very serious point is your responsibility. If you knowingly allow a child who is liable to have an accident himself, or injure others, or may have a meltdown and become aggressive, you will probably find that you will be legally liable at least to some extent for the injures and/or damage caused. Are we as teachers prepared to take on board such children?...</i>

4.8.6 Coding Process : Issues and discussion

The process of coding the transcripts did surface both general and specific issues that are important considerations for further research of this type. Firstly, (as noted above in Chapter 4.82) some posts were very lengthy and therefore complex in terms of coding with several cognitive phases contained within a single posting (this was particularly the case in Group A). It was often this type of post where initial inter-rater agreement was not present. Transcripts that had more of these lengthy posts required extended periods of concentration and all coders agreed that the coding process had taken more time (and energy) than they had anticipated. Having said this, the process became quicker for all of the coders as they began to recognise the type of post/segment through key semantic differences. For example, Personal narration type posts became easy ‘to spot’ because they are similar in structure and relatively simple in terms of a linear ‘story’. Recent research has deployed automated methods of coding that rely on semantic clues to determine a rating (see Kovanović et al., 2016) and this could be an important development to enable future transcript analysis.

Generally, the distinction between exploration and integration phases was more difficult to discern. For example, there was some discussion and disagreement over the difference in coding Exploration ‘Personal Narration’ describing practices at their job (Park 2009) and Integration ‘Creating Solution’. As teachers were often required to talk about their teaching practice in order to reach a solution to a particular classroom problem, there could be some ambiguity here. Example 4.7 below was coded Exploration Personal narration even though at one point the participant begins to move from problem to solution (see underlined, italicised text). However, this was a past event and was not interpreted as being influenced by the present discussion. The coders agreed to interpret the Exploration code as describing past practices which were less focussed on a solution, less reflective and more ‘exploratory’ in nature.

Example 4.7

Yes Participant 15 Currently I have a student in my class who seems to have dyslexia. She has troubles to write sentences and difficulties to concentrate, and when she speaks, she ignores the verb or other meaningful parts of what she pretends to say. She tries hard and it makes me feel a little sad when I see her trying and her classmates look at her and smile. But she is brave and she keeps trying. Unfortunately I think no matter how much I try to help her, she is going to fail her course. It's English level 3. I devote time and do special activities to help her, but I am also forced to keep the pacing and by the end of the term we have to go over the whole contents, so there's no class time available to try and help her. Many institutions don't really care very much about children with special educational needs. I talked to my boss and he said it's her problem and she should try harder.

Lastly, the two sub-categories of 'Leap to conclusion' and 'Opinion' within the cognitive phase Exploration were seen to overlap. As a leap to conclusion can be also interpreted as an opinion then the coders rarely used the former so it is possible that more of this sub category could be identified within the Opinion subcategory. As this did not impact on the research questions this was not seen to be problematic for this study. These and other issues with the analytical framework, particularly when applied in this context, will be picked up again in the following chapters.

Chapter Five Findings

5.1 Introduction

This chapter is structured by firstly detailing the high level results across both groups i.e. descriptive statistics and overall incidence of CP (Cognitive Phase) Exploration, CP Integration, CP Resolution and CP Triggering. This will also include an initial analysis of the sub elements of three of the cognitive phases (as discussed in Chapter 4, CP Triggering was not coded to the sub element). The following sections will look at the results for each group over time and across task type/module. The final part of the chapter will provide key qualitative data that illustrates the various cognitive phase code types.

5.2 Groups A and B : Overview

Groups A and B commenced with 18 registered participants with 15 'actively' participating in group A and 14 participating in group B (where active participation is classified as posting at least one contribution to the discussion forums over the duration of the course). Participation levels varied significantly both within and across the two groups with Group A achieving the highest means for both number of coded segments and number of words per segment (see table 5.1)

Table 5.1 : Mean posts/segments and words written in Group A and Group B

	CPs 1+ Posts	Number of coded segments	Total number of words	Mean segments per learner	Mean words per learner
Group A	15.00	567.00	86,895.00	37.80	5,793.00
Group B	14.00	308.00	32,658.00	22.00	2,332.71

As described in Chapter 4 there were 3 distinct groups for the coding of these transcripts: Moderator posts, Participant posts (Cognitive - the four phases, CP Triggering, CP Exploration, CP Integration and CP Resolution) and Participant posts (Non-Cognitive). The latter showed no cognitive presence as allowed for by the analytical framework deployed. Table 5.2 shows the number of posts for each of these groups.

Table 5.2 : Number of cognitive, non-cognitive and moderator posts in Group A and B

	Group A	Group B
Moderator	85	84
Participant (Cognitive)	639	374
Participant (Non-cognitive)	72	64

Moderator posts consisted of the original task set and then a number of contributions as the discussion developed (see Chapter 4 table 4.3 for the distribution of these). The moderator had been requested to keep interventions equal across the groups and the findings show that this was the case. Group B had a slightly higher ratio of non-cognitive posts to total posts (12.96% when compared to Group A with 9.05%). These were primarily social (e.g. thanking another participant) or requests for technical help.

5.3 Cognitive Phases

As detailed in Chapter 4, Participant cognitive posts contained one or more *segments* that displayed a different cognitive phase. The number of coded segments in each cognitive phase differed between groups A and B (see table 5.3). The majority of segments for Group A were coded as either CP Exploration (43.68%) or CP Integration (43.68%) whereas the majority of group B segments were coded CP Exploration (77.17%). Another notable difference was found in the segments coded CP Resolution which was 9.12% for Group A and <1% for Group B. The CP Triggering code incidence was similar in both Group A (3.53%) and B (2.31%).

Table 5.3 : Actual and percentage of cognitive phase in Group A and Group B

	Group A	Group B
CP Exploration	297	267
CP Integration	297	69
CP Resolution	62	2
CP Triggering	24	8
TOTALS:	680	346
CP Exploration	43.68%	77.17%
CP Integration	43.68%	19.94%
CP Resolution	9.12%	0.58%
CP Triggering	3.53%	2.31%

In terms of word count, there is a similar pattern found (see table 5.4, Appendix 10), though the percentage for CP Integration and CP Resolution increases for both groups indicating that these posts/segments contained more words on average than those coded at CP Exploration. Similarly, the CP Triggering code (often a question) has a reduced word count %. Posts or segments that were classed as cognitive presence overall (i.e. CP Exploration, CP Integration, CP Resolution and CP Triggering) made up 70% of the total number of word count for group A and 74% for group B.

If we combine the total word count of Group A and B's four cognitive phases then CP Exploration accounts for 54.97%. This is more than half of the discussion forum participant input that was coded as containing cognitive presence on these thirteen week courses. This is a

substantial figure both in terms of words produced (approx. 58000 words across two groups i.e. a short novel) and following on from that, a significant investment of time by each active participant.

5.3.1 Cognitive Phase (CP) Exploration

Analysis of the sub elements of CP Exploration across Groups A and B also show differing incidences of code (see table 5.5, Appendix 10). Exploration Personal narration (i.e. Personal narration: story, relating an incident, describing practices at their job, Park, 2009) was the most frequently occurring for Group B (56.40%), but while this was also the most common code for Group A (38.89%), Exploration Opinion (i.e. belief or judgement, personal view, attitude based on grounds insufficient to conclude factual, Park, 2009) was also relatively high frequency (34.97%). High word count percentages for Exploration Personal narration for both groups indicate that this type of post or post segment contains significantly more words than any of the other CP Exploration sub elements.

We can isolate Personal narration in the context of all four of the cognitive phase indicators (see table 5.6, Appendix 10). For Group B this one sub code accounted for 47.11% of all codes, and constituted 58.09% of all words written across the course. Corresponding Group A figures are lower but it still represents a substantial component of the course in terms of participant input (and therefore participant time spent on course).

5.3.2 Cognitive Phase (CP) Integration

Sub codes at Integration level (see table 5.7, Appendix 10) show that the majority of Group B coded segments were classed as 'Building on' (Building on: augmenting a point made by self or by another earlier, Park, 2009). This was also the case for group A but there is a more even distribution across the other sub codes.

5.3.3 Cognitive Phase (CP) Resolution

As shown above Group B participants only reached this phase on two occasions across the entire course. The sub code Wrap up was the most commonly assigned sub code for both groups A and B (see table 5.8, Appendix 10).

5.4 Group A

When we examine the entire Group A course over time (see figure 5.1) we can see that there are differences in levels of the four cognitive phases for each module/task. CP Exploration showed the largest range of incidence of the four phases, ranging from 22.45% in Module 10 up to 55.13% in module 11 (i.e. +/- 32.68%). CP Integration ranged from 33.77% in Module 3 to 53.85% in Module 4 (i.e. +/-20.08%). CP Resolution ranged from 3.33% to 22.45% (i.e. +/- 19.12). While there are no discernable patterns of cognitive phase increase or decrease across all of the modules over time, there are patterns once we begin to look at task type.

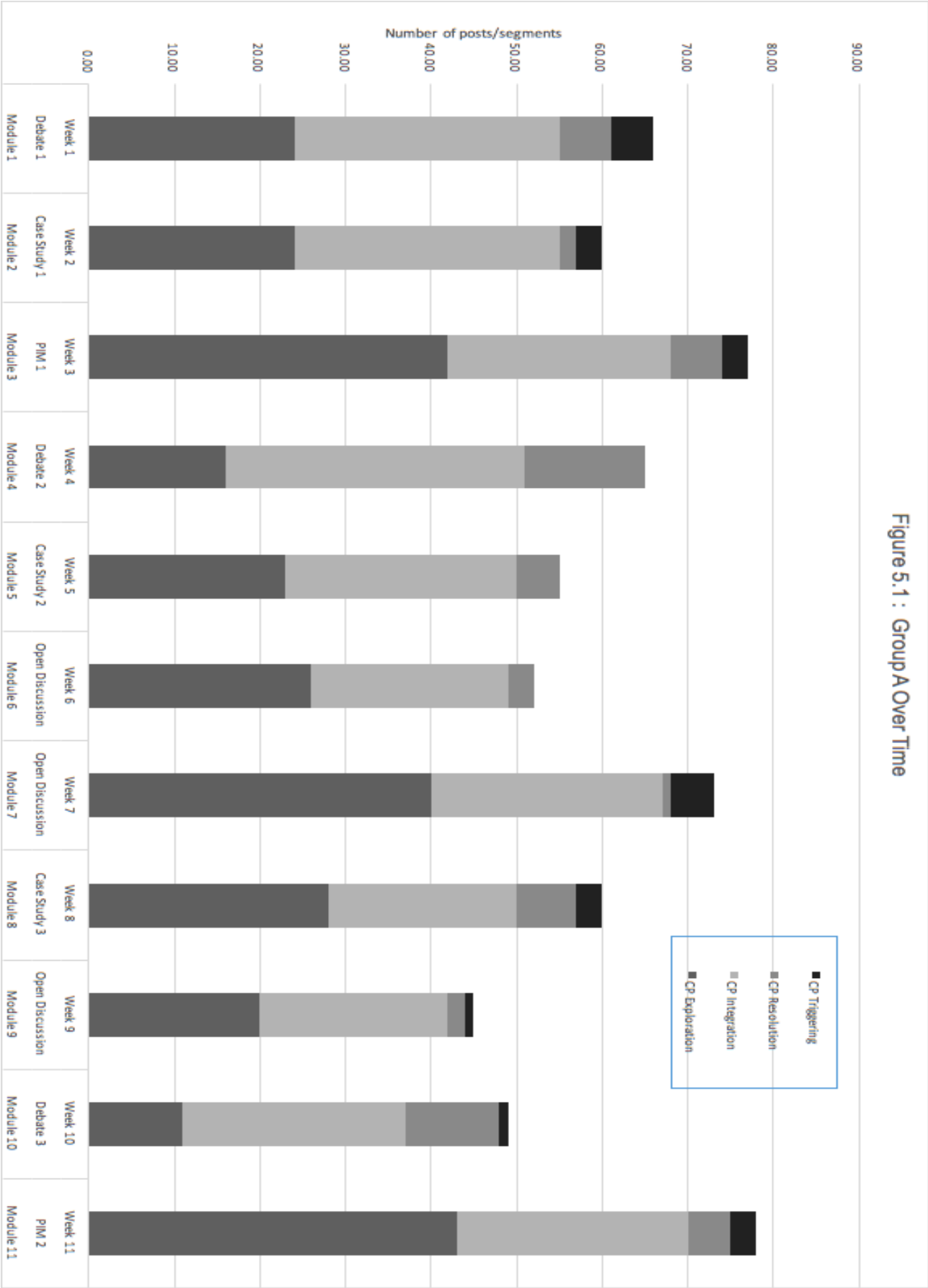
As detailed in Chapter 4, there were three Debate tasks provided for the group A course in modules 1, 4 and 10. Debate 1, 2 and 3 presented the lowest levels of incidence of CP Exploration (36.36%, 24.62%, 22.45%). This task also elicited an increase in CP Resolution with Debate 2 and 3 scoring the highest of any module task (21.54% and 22.45%). This is nearly twice that of the nearest CP Resolution incidence which was found with Case Study 3 (11.67%). Debate 1 has lower CP Resolution and higher CP Exploration incidences when compared to Debate 2 and 3.

Three Case Study designs were deployed for Group A in modules 2, 5 and 8. Taken as a subset of the whole course, CP Resolution incidence for Case Study increases over time (3.33% to 9.09% to 11.67%), CP Integration and Exploration remain consistent across Case Study 1 and 2 but drop for Case Study 3 with an increase in CP Trigger and CP Resolution. CP Exploration incidence remains fairly consistent with a +/- 6.67% range in results.

The Open Discussion tasks mirrored Group B type tasks and were deployed in modules 6,7 and 9. Barring Case Study 1 this subset presents the lowest percentages for CP Resolution (5.77%, 1.37% and 4.44%).

Practical Inquiry Model 1 and 2 task show a similar pattern of response to Open Discussion tasks with a relatively high incidence of CP Exploration phase (2 of the top 3 highest percentages of any module at 54.55% and 55.13%). Both CP Integration and CP Resolution were very similar in their final percentage (CP Integration difference is <1% and CP Resolution +/- 1.36%).

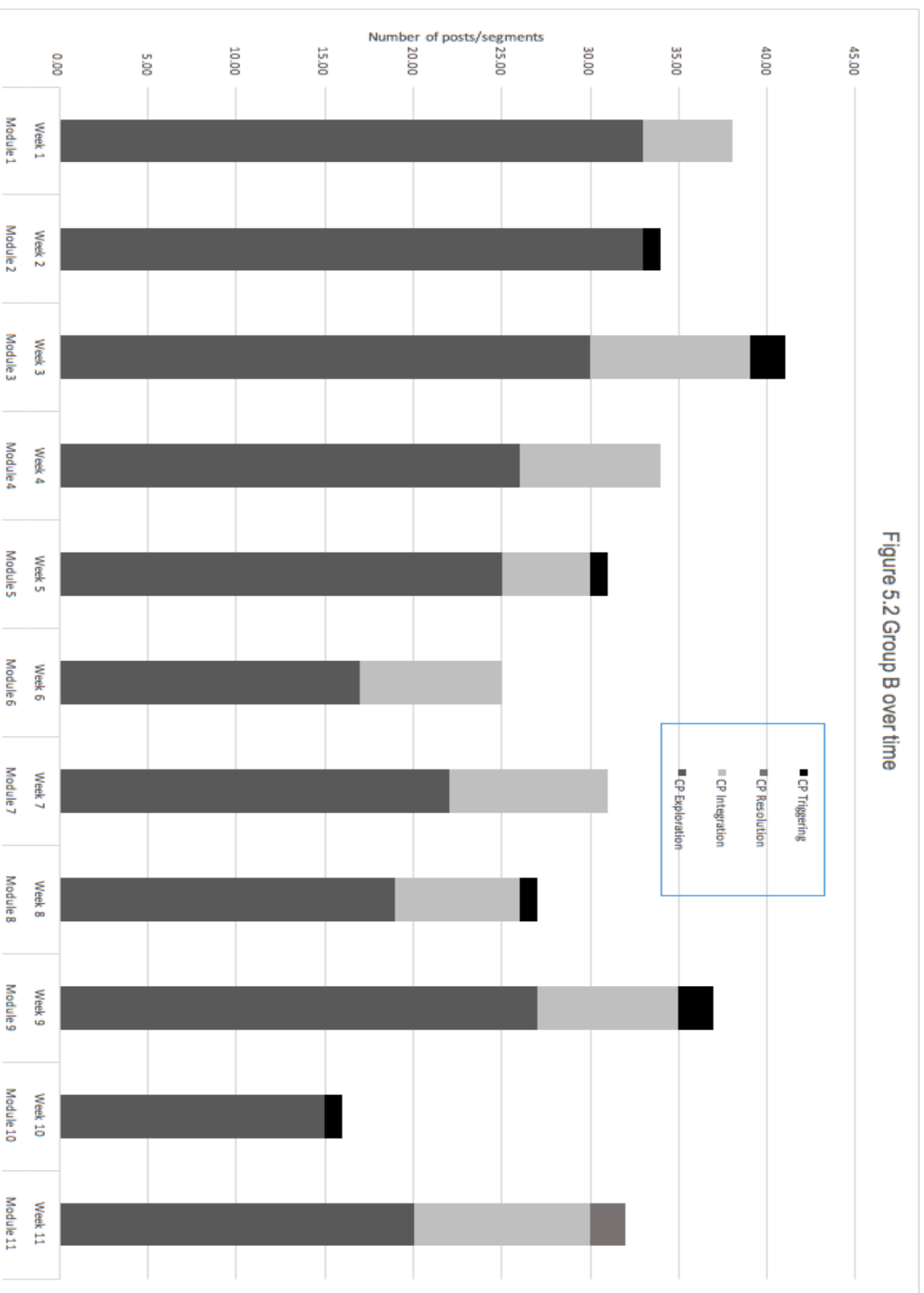
Figure 5.1 : Group A Over Time



5.5 Group B

Compared with Group A, there was a far greater range of incidences for both CP Exploration and CP Integration (see figure 5.2). CP Exploration ranges from 62.50% up to 97.06% (i.e. +/- 34.56). CP Integration ranges from 0 to 31.25% (i.e. +/-31.25%). CP Resolution ranges from 0 to 6.25% (i.e. +/-6.25%), although essentially there was no CP Resolution demonstrated except for two participants at the end of the course (where the task used was a Practical Inquiry Model task rather than Open Discussion). Generally, the picture that Group B presents is no discernable pattern of increase or decrease in the cognitive presence phases over time. The 'gap' between Group B's CP Exploration and CP Integration incidence could be said to narrow as the course progresses towards week 8, but this is reversed in weeks 9 and 10. There is also a far more obvious skew towards CP Exploration than with Group A (as the means above have already demonstrated). CP Integration is highest in modules 6,7 and 11. There are no subsets to explore with Group B as each task was Open Discussion (except for Module 11), However, there were some minor difference in the type of questions and prompts deployed in each Open Discussion task and this will be examined further in Chapter Six.

Figure 5.2 Group B over time



5.6 Group A and Group B Task

Table 5.11 (see Appendix 10) provides the aggregated results for each subset (task) in groups A alongside the Group B Open Discussion modules (module 11 has been removed from this table as this was a Practical Inquiry Model task). As was indicated above, the overall Debate means have the lowest CP Exploration and the highest CP Resolution. Group B Open Discussion tasks have the highest CP Exploration posts by a significant margin. If we aggregate a combined CP Resolution and CP Integration then the task types that appeared to demonstrate higher order thinking, come in the order of Debate (68.33%) Case study (53.71%), Group A Open Discussion (45.88%), Practical Inquiry Model Task (41.29%) and finally Group B Modules 1-10 (18.79%).

Focusing on Group A, Debate 1 has a higher CP Exploration incidence compared to Debates 2/3 and one explanation for this could be that the task and its requirements were initially unfamiliar to participants e.g. there was some confusion when participants were assigned a stance that they did not personally support. It may also be that Debate 1 was the first module and participants were still becoming familiar with the course and its requirements. Case Study had the second lowest incidence of CP Exploration (42.86%) which is just below the mean for CP Exploration in Group A. Above the mean, we find Open Discussion and Practical Inquiry Model tasks. Practical Inquiry Model task 1 and 2 show similar patterns to Open Discussion but with a higher incidence of CP Resolution. A possible explanation for this might be that if participants do not answer the third question of the Practical Inquiry Model task then the prompts do not differ significantly from an Open Discussion task. This third question was not engaged with by participants on a frequent basis and therefore represented a 'missed opportunity' for cognitive phase development. This was a common occurrence as we will see throughout the following analysis. Darabi et al. (2011) found that their 'structured' task (which has a similar design to the Practical Inquiry Model task in this study i.e. a series of detailed prompts designed explicitly to move participants through the cognitive phases) resulted in the highest CP Exploration (48.8%) of the four task types deployed. This mirrors the results for Group A's Practical Inquiry Model tasks which also had the highest CP Exploration of any task and a similar incidence (54.84%) to the Darabi et al. (2011) study. As noted in Chapter 2.36, Darabi et al. (2011) suggest this may be caused by the 'simplicity' of the task. This appears to match the findings of this enquiry where Debate and Case Study, both more complex strategies, resulted in the least incidence of CP Exploration.

Table 5.12 (see Appendix 10) breaks the subsets down further into the sub elements of each task. Debate has lowest incidence of both Opinion (8.38%) and Personal narration (7.82%). Group B Mod 1-10 has the highest Personal narration (45.29%) by a significant margin (+18.02%). Case Study has highest Creating solution incidence (27.75% by margin of +20.61%) and similar to Debate a relatively low % incidence for Personal narration (10.98%). Supported divergence is barely present across any of the subsets except for Debate (9.50%) and to a lesser extent Case Study (2.31%). Leap to Conclusion and Thought experiment were very rarely coded throughout.

The final data (see table 5.13, Appendix 10) shows the task type and total word count per module followed by % for each sub-element. The highest word count for Group A was for Practical Inquiry Model tasks and the lowest Open Discussion. Case Study and Debate had similar word count totals.

The remaining sections of this chapter will provide qualitative examples of the Exploration sub codes (Personal narration, Opinion, Information sharing, Agreement and Disagreement), before examining the higher cognitive phases of Integration and Resolution elicited by different task type. The last section will provide qualitative findings related to CP Triggering.

5.7 Exploration : Personal narration

As the findings above show, Personal narration was the most common sub element within both group A (17.50% sub element code incidence) and group B (47.11%). Personal narration in this context commonly involves a story or a description about the following: a specific learner or groups of learners (e.g. a class), classroom practices in country, school, and class context. It also often refers to a problem, which is illustrated by the story. Of all of the posts/segment codes these were the most likely to 'display' emotion from both the participant when writing and the group when responding to the post (we cannot comment on the degree to which emotion was or was not felt, only that these posts and associated responses were attempting to convey this). The following examples taken from different modules and groups illustrate a range of identified Personal narration type posts/segments (all following examples are represented as originally posted with no corrections for grammatical/spelling errors etc.).

Example 5.1 : Learner + classroom practice

Participant 30 : I teach in a school where we have a few multilingual and multicultural students. I don't have many students in my classes, maybe 1 one every few years. My recent experience is with a student from Morocco that was born in Italy. She was regularly attending school without wearing a veil on the head. One day after one of the many terroristic attacks she decided to wear the veil as she wanted to share her religious beliefs. I gave her many opportunities to share the reasons behind her change and it was very nice how her classmate supported her. She completed the cooking school this year and today she took her final exams and she decided to present a ppt about the Ramadan, what happens during this period and what people can eat. It was a great success. Whenever there was an opportunity I asked her to tell the class what was different in the country of origin of her parents: food, religious practices, way of living of teenagers and it was always very interesting.

Example 5.2: Learners(class) + problem

Participant 10: i teach in the 5th grade , my students might be like flowers , different colours with different smells , since i have flowers, thorns are there as well , i have 2-3 students in every class who are out , i keep trying by all the means to make them inside the class atmosephere but in vain. the obstacle number 1 they dont understand even the basics of the language

another obstacle , they think that the English class is for fun since the teacher is foreigner and can not understand their language

Example 5.3: Learner (Individual) + problem

Participant 11: One adult came to me saying she wanted to learn English..well, actually, saying she felt like she needed to learn English as she could get a better job if she would do that. However, she had a fobia for it, the fear was really that intense. It seems it had come from her past and bad experiences at school. We did an intake, then one lesson and then she emailed and said: I really can't do this, I'm sorry, just keep the money.

I emailed her to tell her to come and have a cup of tea and talk about this...but she never responded anymore...

Example 5.4: Classroom practices

Participant 4: I tried to invent a system of funny fines during speaking activities: if a student uses L1, his/her partner (or sometimes me) gives him a yellow butterfly. At the end of the lesson we count who gets the less butterflies and find the winner. My students like the idea to control each other and try to do their best to get rid of fines

Personal narration is a 'wide' band for classification which includes posts that could have been constructed with little thought (see e.g. Dewey's stream of consciousness) to posts that demonstrate some degree of reflection. As noted previously in Chapter 4, the coders experienced some difficulties in deciding when to code certain posts/segments Personal narration and when to code Creating solution. On occasion this appeared as arbitrary as a change in tense i.e. past tense description of 'practices at their job' (Park 2009) equals Personal narration whereas a future tense description of practices in relation to a problem begins to move towards Creating solution (commonly occurring in Case Study design as this was the intended 'mechanism' of the task i.e. identify problems, create solutions, apply solutions). The method adopted by the coders was to recognise when the former was 'this is what I do' compared with 'this is what I am going to do in the light of x,y,z'. Another issue was recognising if Personal narration was more a form of CP Integration when the ideas from the course were being integrated retrospectively into a teacher's previous experience of a learner, classroom practice, school context etc. In other words, some stories for the participants, appeared a process of examining existing beliefs/understanding in the light of new ideas, knowledge etc. being encountered on the course. The problem with this from a coding perspective is the coders needed to have a thorough understanding of all of the course content to identify when this was occurring (i.e. it was not always clearly signposted that this early form of integration was occurring). However, this was not a frequent issue and unlikely to have impacted to any great extent on the findings of this study.

5.8 Exploration : Opinion

Opinion has the second highest sub element incidence for both groups. As with Personal narration it is a wide band of classification that includes many different types of post/segment such as providing an opinion on a technique e.g. 'I like...' or 'I think that'.

Example 5.5

Participant 14: the onion ring! it is great for so many things, we use it as an icebreaker more than anything else.

Example 5.6

Participant 9: I really like the food sharing part. Can it be any better way of socialising and getting to know each other better than trying different food? :)

Given that not all teachers had previous experience of learners with Special Educational Needs, Opinion was perhaps necessary at times. Example 5.7 shows that the participant is venturing an opinion based on their more general teaching experience. If this post had integrated other ideas and sources more obviously and effectively then it would be moving towards CP Integration - Creating Solution.

Example 5.7

Participant 20: Hi Participant 15

I don't have teaching experience children with ADHD . But I think that children with ADHD can take part in challenging and not quite long game activities ,and if he / she can perform a little , we should make positive feedback for his /her achievements . This can affect his / her learning progress .I would like to know your idea.

Short responses to another participant often fell into the Opinion sub-category (see example 5.8). Though there is an opinion given on a rubric here, there is also a social element (i.e. expressing gratitude). It may also be that the 'assessed' requirement to reply to other participant's posts increased this kind of CP Exploration (very low cognitive presence).

Example 5.8

Participant 9 : This is a great rubric to use Participant 15, thanks!

When we look at the different task types in Group A we see one discernable pattern, that of low Opinion incidence for Debate. This could be explained by the nature of a debate and the need to support an argument, which tends to move the post/segment towards CP Integration (justified hypothesis, building on or supported agreement/divergence) more quickly (see example 5.9

which was coded Integration Building on). The 'mechanics' of Debate will be looked at in more detail in section 5.12 below.

Example 5.9

[Code : Integration - Building on]

Participant 26

Hello everyone,

I realise I am very late to the party! I just started a new job last week so it's been hectic settling in.

I am for the motion, and while I don't agree with it on a personal and professional level, the only argument I can think for this motion is similar to Participant 15. Having seen the amount of damage very young learners do (age 2) to themselves and to each other because of the lack of gross and fine motor skills on a daily basis, I would say this might be the only reason for separating dyspraxic students from others in team games.

As teachers, we have a duty of care to protect all learners and in this day and age of the hypervigilant parent, schools must also consider the possible legal and financial burdens that might arise, should a student be injured (by a student who is known to have dyspraxia, or if they themselves are dyspraxic) because the school could very well be sued for not protecting their students.

Opinion in Case Study (which had an incidence of more than double that of Debate) was sometimes found when participants attempted to interpret a fictitious situation (i.e. the case study) with limited information. It was characterised by only referring to one source (the case study) and displayed some degree of imagining the absent facts of the scenario. This was often the stage before teachers brought in others sources and ideas to move on to CP Integration.

There were no issues in coding for Opinion. It was generally very clear when a participant was referring to an unsubstantiated belief, or was imagining something without clear reference to 'facts'.

5.9 Exploration : Information sharing

Information sharing was evident in the sharing of links (see example 5.10), resources, documents etc. or participants extracting information from a text, video etc. and then sharing that information with the group. It was solicited by task but also impromptu. With the latter it provides evidence that a participant had begun to look outside of the core course content, which might indicate a certain level of engagement and curiosity (the beginning of the Practical Inquiry Model cycle). Information sharing did not necessarily feature in a particular stage of the discussion and could be found at any point throughout a transcript i.e. it was not necessarily something that occurred early in a discussion and subsequently built around as collaboration

developed. Information sharing was also a part of some participants' longer posts e.g. an Information sharing segment might be found at the end of a post with additional reading information that did or didn't pertain to the post. As with Opinion there were no repeated difficulties or disagreement between the coders when assigning this sub-element.

Example 5.10

Participant 10 : I came across a whole series of lesson plans for presenting ASD to learners at all different levels. Some of the levels have a powerpoint together with the lesson plan, the top level has lots of tasks to help understanding. On reading the lesson plans, I thought that they could easily be adapted for presenting other differences such as ADHD or dyslexia and dyspraxia.

(link)

I liked the Muppets video. There is another awareness video clip which would be interesting to use with older classes.

(link)

There was generally a positive response from participants to an incidence of Information sharing. This was mainly in the form of expressing gratitude or low level cognitive phase e.g. Opinion (this is great etc.), rather than moving on to integrate the ideas shared into a higher cognitive phase post/segment. However, we do not know what occurs 'out of frame' subsequent to Information sharing. Did participants take these resources and go on to experiment and reflect? If they did, it was not reflected on in the discussion forums subsequently. Given the known pressures on teacher's time it seems unlikely to have been the case to a significant degree for a significant number of participants.

As noted above, Group A's Case Study had the highest incidence for Information sharing and this was usually found in the initial exchanges where participants exchanged information that had already been provided by the Case Study text (see example 5.11). If the participants went further than the information provided in the text then this sometimes moved into Opinion i.e. unsupported speculation on why the teacher was doing 'x' or what the learner was thinking.

Example 5.11

[Code : Exploration - Information share]

Participant 33

Although the teacher recognises that Zoe is a clever and sociable child, he fails to understand the real reasons why she has the difficulties he mentions here. He blames the previous school for not paying much attention to writing skills.

It could be said that Zoe is a dyslexic learner because she shows difficulty in coping from the board (probably due to poor working memory), she struggles in putting her ideas in a logical order (sequencing

weakness), she lacks self esteem ("I'm embarrassed", I'm dreading that") but on the other hand, she can show creative thinking (" she joins in class discussion ", " I have so many ideas") . She also enjoys games and acting (good kinaesthetic memory).

[Code : Integration - Building on, Creating solution]

What Participant 26 and Participant 15 have already suggested here is some good advice to the teacher and I agree with them. I would say, too that it would be better for him to ask for professional help just to be sure that she is dyslexic (yes, labels again), before talking to parents, to Zoe and to her classmates. In the classroom, he could adopt a more holistic approach and as we see in the teaching strategies 3 in this module, he could emphasise the good points and that learners with dyslexia are often highly intelligent people. Talking to Zoe, he could explain the strengths and weaknesses of her brain as dyslexic, so that she can feel relieved and less stressed. This way, he can boost her self confidence and at the same time set a good example of inclusive behaviour to her peers.

In the following example, Participant 15 proposes that the group should gather together tips (i.e. a potential extended form of information sharing). This is also an example of attempted shared teaching presence (see section 5.17 below).

Example 5.12

Participant 15

.....

Does anyone have any tips which they have tried, or they have heard about from colleagues? If everyone could try and share one tip, by the end of the week we should have quite a collection.

This elicits three responses that are then classified as Exploration - Personal narration. In other words, teachers did not respond by simply sending links, the tips were embedded in stories. Personal narration draws on the experience from within the community (mainly in the form of stories), whereas Information sharing looks outside to a variety of different forms of information (usually non-narrative).

5.10 Information sharing on Facebook

In Group A, an unexpected development occurred in Module 11 when a participant suggested that the group continue collaborating after the end of the course. Here, it is interesting to note the participant's request for the group to support each other as they continue to reflect on the course and 'actually put it into practice.' This implies that there had not been time or opportunity to do this whilst the course was running. This is an important consideration for course design (see comments connected to the task set in Group A Module 7 later in sections 5.15 below)

Example 5.13

Participant 11

Dear colleagues,

I would like to ask/propose something. No idea what you think and whether this could be set up.

During this course I have thoroughly enjoyed getting to know you, talking with you and exchanging ideas and I kind of don't want it to stop. Especially because after the end of the course comes the time for me to let it all sink in, reflect, see what I can really use in my day-to-day teaching, and actually put it into practice.

*Now, for me it would be a real shame if this would be the ending of the sharing of ideas, the exchanging of how it went putting theory to practice etc. This is why I would like to know, **Moderator** and all, whether it would be possible to make some kind of 'study group' somewhere. Where we can keep on exchanging ideas and telling each other how we have used ideas of the course and whether it worked or not, where we can help each other put all of this in practice.*

Would it be possible on this forum? Would it stay active? A group on Facebook maybe? It could be I'm the only person wanting this but I'm just curious...

The group decided to start a private Facebook page with the following purpose :-

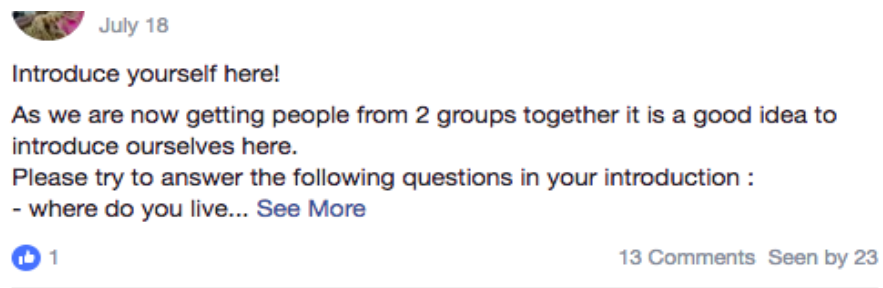
“This group has been created to gather the group of teachers who have taken part in the British Council Pilot Course on “Applying Special Educational Needs Practices” in order to promote further discussions on pedagogical matters involving ELT teaching issues and concerns. It is a space to promote multicultural sharing and learning.”

Group A were subsequently asked by the moderator if Group B (who were unknown to Group A) could join. The participants in Group A discussed this via email with the moderator and decided that they would permit this group of teachers to join, but the page would then be changed to a ‘secret, private group’. The discussion was interesting in that there was an evident tension between protecting the identity of the group (e.g. “we don’t want to become anonymous”) while still wanting to be inclusive and welcoming. Inclusivity was a key theme of the course content so excluding other teachers from further learning opportunities at the end of the course would have been an interesting outcome. This ‘enforcing’ of the new communities boundaries, though, is probably more a reflection of the tangible sense of group identity that had formed in Group A.

While the Community of Inquiry framework is unable to ‘see’ this important event we can analyse the cognitive presence that emerged as the community moved to a new platform (Facebook). As of 27.09.17, the group engaged overwhelmingly in Information sharing (usually sending a link to a relevant web site i.e. SEN related) and was still active three months after the course finished. This CP Exploration (approx. >95%) is in contrast to the levels of Cognitive

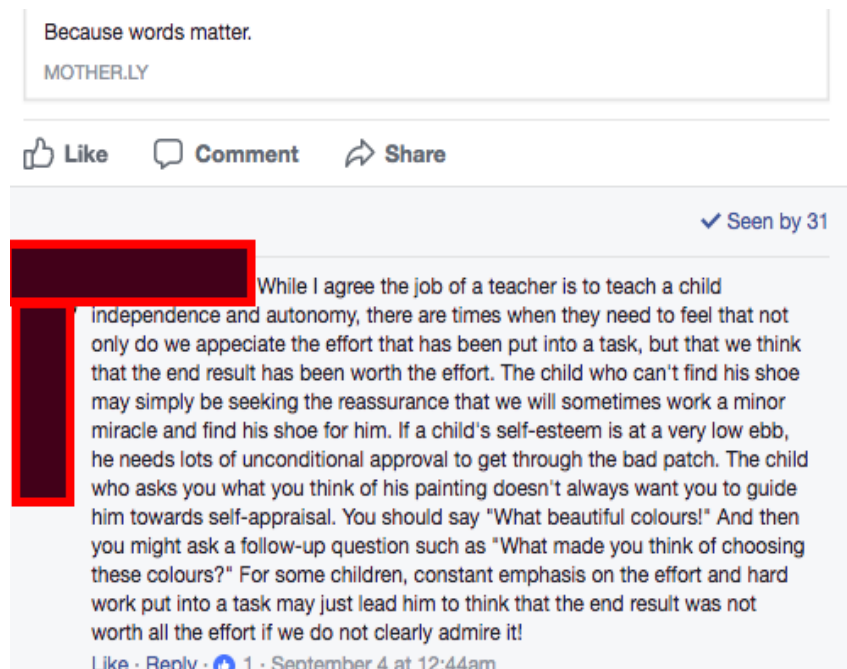
Presence that were being achieved on the course (i.e. Group A : 43.68% - see table 5.3 in Chapter 5.3). There are likely to be a number of causes for this. Firstly there was no (or very little) teaching presence evident in this new community. Initially, there was an attempt to facilitate discussion, for example, Participant 11⁶, the Facebook group's founder, requested that members introduce themselves (see example 6.23).

Example 5.14



There was also a request to share and discuss the course assignments prior to submission and there was some response and further comments linked to this. There were also isolated examples of comments that related to the information that had been shared (see example 5.15 which would be classified as CP Integration Supported divergence). However, at the time of writing, these types of higher cognitive response and exchange were the exception to the rule.

Example 5.15



⁶ An interesting aside here is that Participant 11 had the highest incidence for CP Triggering during the formal course (see 6.6 below).

Secondly, the significant shift to CP Exploration is possibly caused in part by the lack of assessment, thereby removing any requirement to contribute. Thirdly, the platform itself. Facebook is not generally used for in-depth discussion and the sharing of links is a more common use of the social media platform.

In terms of the value of this new community, we can refer to the wider literature on professional development for teachers. Walter and Briggs (2012) in their report 'What professional development makes the most difference to teachers?' list two characteristics that are pertinent: that it involves teachers collaborating with other professionals and that it should be sustained over time. Whereas the formal course had a finite length this new community is not time bound and theoretically allows teachers to continue working together throughout their careers. However, when we use the Community of Inquiry framework to analyse the interaction then the latter falls significantly short of collaborative reflection. Referring back to our second research question, this does lend further evidence to the importance of task design and teaching presence to achieving the higher cognitive phases. Once the group was left to provide its own direction (or teaching presence) then there was very little evidence of any form of reflection.

5.11 Exploration : Agreement and Exploration : Divergence

CP Exploration Agreement had the lowest % incidence of the evident sub elements (see table 5.5, Appendix 10) and typically was in the form of a reply to a posting, either in one sentence or if longer with no significant substantiation or building on of ideas (see example 5.16).

Example 5.16

Participant 11: I completely agree with you. Inclusion is the key, I think!

There was no CP Exploration Divergence evident but this is common in online discussion as disagreement usually requires substantiation, whereas agreement can also serve the function of social support, building group cohesion etc. From a cynical perspective, if the assessment requirement is for participants to interact, agreement is also a quick and easy way to appear active in forum discussions with very little effort or cognition. As with Information sharing and Opinion there was no disagreement amongst the coders when choosing this sub-element.

The structure of the following findings will differ from above which looked at each of the CP Exploration sub-elements in turn. Instead, the next sections will examine three different task designs (Debate, Case Study and Open Discussion) and draw on the CP Integration sub-elements where relevant.

5.12 Integration : Debate

Referring back to table 5.11 in Appendix 10 we see that Debate had the highest incidence of CP Integration at 51.11%. As noted in Chapter 2.36, Darabi et al. (2011) also found evidence of a

significant move beyond CP Exploration when deploying a debate task design and attribute this to the 'argument dimension' and the requirement to take a position. In module 6, Group A's participants discussed the Debate task in relation to developing higher order thinking skills. Participant 20 (example 5.17) notes that the mechanism of taking a position that was not their own required that they research further in order to support an unfamiliar stance (the implication perhaps that if the stance was their own then they would need to do less research). Developing the ability (or habit) to see another's point of view is also seen to be a benefit of the Debate type task (example 5.17, 5.18, 5.19).

Example 5.17

Participant 20: In terms of HOTS, the debates are a perfect example. If I must support an opinion I don't agree with it, I need to research, discuss, and support it as if I do. This has broadened my acceptance of differing opinions by looking at them from another point of view. I would use this in my classroom teaching to understand learners' needs on a more personal level. By doing this, I will be able to construct better strategies to promote effective learning.

Example 5.18

Participant 15 :I admire the succinct way in which both Participant 33 and Participant 11 have been able to describe the usefulness of participating in our forum debates, especially as they have been able to do so in a way which brilliantly displays the Bloom Taxonomy in action. Bravo to both of you. I would also like to say that in our very first debate, I was impressed by Participant 11's ability to state in a measured and sensitive way both sides of a debate, demonstrating her ability to analyse and evaluate before expressing her conclusion. This is a useful skill to pass on to learners in the classroom, and not to be neglected by the teacher. To be able to see something from someone else's point of view is a very important life skill.

Example 5.19

Participant 11

Dear Moderator,

My idea is that the discussions push us onto the HOTS. The reason being the LOTS are taken care of in the questions in the unit but the HOTS are used in the forums. Specifically to be creative with the things we learn in the unit, to talk about how this affects real life, to discuss how these issues could be related to our own students. I would say these are all HOTS. It shows how usefull discussion and debate is and this is something I could & do use in my lessons. Because I teach one-to-one this is probably easier but I am now of the impression I can do more to liven up the discussion and to make my students see different points of view.

An unexpected outcome suggested by these examples is that the participants see the task type and form of online interaction as something that could be replicated in class with their own students. This potential influence of task type itself (rather than content contained within the

task) on a teacher's classroom practice and methodology was unplanned for, but a positive outcome i.e. that successful interaction in an educational community of inquiry may be a model for teachers to recreate in some way through their own teaching. This, conceivably, is something that could be overtly designed for in a course.

Another important 'quality' of Debate (also referred to by Darabi et al., 2011 above) is that of argument. Pawan et al. (2003:127) found in their study, which deployed 'free' discussion tasks, that real examples of argument/counter-argument and 'cycles of challenge and explain' were absent i.e. no posts were coded for the subcategory of divergence within Integration. However, for this study, 9.50% of posts/segments in the Debate type tasks (see table 5.12 in Appendix 10) were coded CP Integration Supported divergence. This was significantly higher than found for any other task (e.g. Case Study presented the second highest incidence with 2.31%). It appears that the Debate format has successfully increased the need for participants to question and disagree with the views of others. Example 5.20 (an abbreviated post) gives example of both argument and counter-argument from participant 26.

Example 5.20

Participant 26: Thanks for your spirited reply! I appreciate your comment that teachers are beleaguered - i have first hand experience myself of this, and yes we don't live in an ideal world, but change starts within the school, and with teachers.

...I will echo my first sentiment and Participant 9 and Participant 11's, in that teachers ARE a first-responder, able to pick up on warning signs, but because they are not experts in SEN, they should not be made accountable because they are not be expected to diagnose and assess.

I should have made myself clearer in my argument - I feel that if teachers are given appropriate training in ALL SEN, (much like first aid), they become tuned into spotting issues when they arise. In time, the effect will trickle through so that instead of the situation we have now, where many students go undiagnosed for many years before reaching us with issues that have resulted in fossilised habits & responses and teachers' reactive responses, we will be able to be proactive and reduce the teaching burden for others.

You say that this means taking valuable time away from other children, but a well-trained teacher who can differentiate and is adaptable to learning needs (as we should all be) would not have this issue - a big part of it is knowing how to plan and structure lessons that take into account the learning needs of all students (which I have experience of training others in as a teacher-trainer)....

While CP Integration Supported divergence had a high incidence, the highest frequency sub element for Debate 1/2/3 was that of CP Integration Building on. In the Debate task this often took the form of taking the ideas of those participants who were on the same side of the motion and expanding further (see example 5.9 above). CP Integration Supported agreement and CP

Integration Building on were in many ways similar but with the former posts usually explicitly stating agreement at the beginning of the post.

In terms of the Community of Inquiry framework and this study's research questions, Debate is a 'successful' design. However, not all participants preferred the Debate type task. Participant 19 (example 5.21) appears to see Debate tasks as repetition of the course content, rather than bringing in personal experience or external sources/ideas. In other words, this participant viewed Debate as a construct through which to reformulate existing knowledge rather than create new, practical ideas as part of the evolving group discussion.

Example 5.21

Participant 19: I totally agree with you Participant 14. I thought there was no point in repeating the same things that are in the videos and the readings provided by the course.

In contrast, Participant 33 (example 5.22) when describing the Debate task and how it elicits higher order thinking skills, could be illustrating an ideal progression through the Community of Inquiry cognitive phases (none of the participants were aware of the latter as the guiding, analytical framework for the research) i.e. CP Exploration ("describing different cases", "focused on specific strategies", "classified their needs and our obligations or restrictions as teachers" etc.), CP Integration (we generated new ideas and techniques based on our teaching experience..", "we collaborated with our group by supporting one another's opinion and providing strong arguments") CP Resolution ("At the end, we reflected and evaluated the outcome. We reached to conclusions, we defended our personal beliefs". Participant 33 also sees the importance of social presence within the community i.e. "gave praise and showed our appreciation to one another."

Example 5.22

Participant 33

Dear Moderator,

Regarding the HOTS in this course, I would take the Dyspraxia module debate for example. Each one of us stated their opinion by analyzing why the dyspraxic learners should or shouldn't take part in team games. We demonstrated higher order thinking skills by describing different cases. We focused on specific strategies, we classified their needs and our obligations or restrictions as teachers, We separated the team sports into demanding and risky for the dyspraxic or mild ones in order to prove that some sports are more suitable than others. Also, we generated new ideas and techniques based on our teaching experience or our childhood experiences, we collaborated with our group by supporting one another's opinion and providing strong arguments { based on specific resources or examples from our learners }. At the end, we reflected and evaluated the outcome. We reached to conclusions, we defended our personal beliefs and we gave praise and showed our appreciation to one another.

The value ? Personally, since I had the knowledge and the tools { after studying the module pages and internet resources } to support my view , I felt very motivated and confident in taking part. So, I feel the same happens in the classroom. If the students have the knowledge and understanding and the right guidance they can proceed to more advanced thinking skills

Lastly, compared to other tasks there is a less practical orientation evident in the Debate discussions. This is noteworthy given the importance of classroom experimentation (i.e. practical application of learning) to teacher professional development. However, a course that requires some focus on theory alongside practice is not uncommon and in some cases will be an explicit aim. While the content of the Debates in this study did lean more towards the theoretical, this could also be addressed with a new task design. For example, a debate format where half of the group are proponents of a certain methodological approach while the other half are against the same approach. This might lead to a discussion that focuses more on the practical and could be followed by CP Resolution of real classroom application of the previously 'integrated' ideas. The next section looks at the Case Study design, which by nature has a more practical lean than the Debate type strategy.

5.13 Integration : Case Study

After Debate, Case Study had the highest incidence of CP Integration (45.71% - see table 5.11, Appendix 10). When we drill down to sub element we find that it achieved the highest incidence of Creating solution when compared to other task designs (27.75% - see table 5.12, Appendix 10). Example 5.23 illustrates a typical CP Integration Creating solution type post. Here we find a fully contextualised series of techniques, approaches, solutions etc. that has the advantage of not being tied exclusively to a single participant's context (and potentially therefore less relevant to all of the group). Instead, the Case Study design provides a shared context that was collaboratively explored by the participants in an earlier part of the discussion. We can see again here the aforementioned 'fuzzy' line between Personal narration and Creating solution (see italics - here is a Personal narration type sentence embedded within the post, but in this case the past 'story' is integrated into the future solution, and therefore the entire segment is coded CP Integration Creating solution).

Example 5.23

Participant 15 :Having enlisted the help of Zoe's parents, he should invite them to a meeting to discuss the methods to use in order to help her. It is very important that anyone involved in her teaching should be using the same methods, or the effect will be the opposite to what is wanted, and Zoe will end up feeling useless and resentful. Any other teachers having Zoe in their class should also be a part of this concerted effort. It is to be hoped that if Zoe's progress (or lack of progress) warrants it and Individual Education Plan (IEP) can be put in place for her.

He should begin with reading using the Orton-Gillingham approach, which teaches from the bottom up. Using phonics, the children learn the sounds which make up phonemes, and the letters which combine to

make the sounds. Then they learn how syllables and words are made and so on until they learn that paragraphs make stories and reports. This is a method using phonics at the beginning. The memorisation of the words can be reinforced by the use of pictographs. This was very efficient with one of my dyslexic pupils whose mother taught him using this method. Then we must address the sight words which cannot be taught in this way. They are very important as they have a very high frequency count so they should be practised every day until learned. Here the use of pictographs can also be helpful....

In terms of the Community of Inquiry framework and this study's research questions, Case Study was successful in pushing participants towards CP Integration and in particular the sub element Creating solution. The latter was also the finding for the Case Study design that was deployed by Richardson and Ice (2010) where Creating Solution accounted for 23% of all of the coded posts (in contrast this sub code presented 0% incidence for Debate and 1% for Open Discussion in their study). It was evident that Case Study is an effective mechanism for creating solutions, although the degree to which these were collaboratively arrived at varied. The desired next stage of applying the solution i.e. (CP resolution) will be examined below in section 5.16.

5.14 Integration : Open Discussion

Open Discussion was the least effective task design in terms of the Community of Inquiry framework (see table 5.11 in Appendix 10). It was, however, more effective in Group A then it was in Group B which perhaps gives us an indication of a general Group A positive 'effect' regardless of the design deployed. The most common sub element in Open Discussion was that of Building on (as with Debate). The nature of Building on is expanding on your own ideas or that of another participant. For the former this usually occurred in longer posts where initial exploration at the start of the post might be followed by Building on. Of all of the CP Integration sub elements it could be argued that Building on is the least cognitively and linguistically demanding. For example, constructing a 'Justified hypothesis' is a longer and more complex task than expanding on a single idea that has surfaced through discussion.

5.15 Integration : Open Discussion and classroom application

Group A Module 7 introduced a slightly extended version of Open Discussion with a prompt that asked "If you are teaching a class, experiment with an assessment approach this week and then report back to the group on how it went". Example 5.24 shows an initial post and exchange that resulted from this prompt.

Example 5.24

Participant 1 : This week I had to assess the Rise of the Babylonian Empire. The regular test had been worked out, when I started to read this module. I made a change. Sometimes as some of you have posted it seems that it is working against the stream. Some teachers still think that everyone should be assessed in the same way. BUT... I thought to myself, if I hve had the opportunity of this module this week, I now have the responsibility of working in a different way.

So that is what I did. In this class there are some learners with SEN (dyslexia, dyspraxia and some gifted and talented). I gave each one a character. Characters included kings, cities, soldiers, priests ... were distributed among all. The talented students had the responsibility to set the scenario. We had real battles. They dressed up using recycled materials, and colored papers. Everyone had the opportunity to participate. †Then the gifted and talented learners made a chart with conclusions. I could assess each learner, knowing the needs of each one, and pushing them to do their best, No one felt less important. At the end all of them could retell the conquest of Sumer and the rise of Babylonia!

Participant 15 : Hi Participant 1! What a brilliant idea, and how brave of you to introduce it! How did the learners react, and what was the evidence for learning in the end? I am for TjL but tend to stick to more "traditional" methods of going about it. I must be a bit more adventurous.

Participant 33: Participant 1, you had a great idea to make your Ss be involved in such a fun way to their learning! I am sure they will always remember what is needed about the rise of Babylonia! I have no experience in teaching in elementary or secondary schools so it sounded fascinating to me. On the other hand, aren't you going to assess them later through a standard test? I mean, aren't you obliged by the headmaster of the school ?

Moderator : Excellent example of inclusive assessment, Participant 1! The tasks were differentiated according to the level and abilities of the learners and all of them contributed to the end product.

The examples above show very little critical reflection (this module only had one post that achieved CP Resolution) and this is perhaps partly due to the mechanism of the task (the prompt only asks participants 'to report back on how it went'). Participant 1 did not respond to any of the requests for clarification/expansion and this again shows us the missed opportunity phenomenon that was found throughout the transcripts (i.e. that specific discussion exchanges peter out where there was clear potential for further development).

Another participant described her use of a rubric with a class of teenagers. This again resulted in very little critical reflection by the group, though the resource was shared and other teachers expressed an intention to use the rubric in their own classes (see example 5.25)

Example 5.25

Participant 30

thank yo so much for your suggestions, they are simple and easy to use also in the Italian school system. I will try it as soon as I have the opportunity

Importantly, the vast majority of the group did not engage with the class experimentation prompt in any form. Example 5.24 above illustrates that this task had potential (e.g. Participant 15 asks two critical questions which are ignored), but again fell somewhat short of what was intended by

the design. This should have been to explore ideas, reach some consensus or solutions, apply in classroom, and collaboratively explore the results. For this to happen it is likely that the task would have to be very clearly understood by all participants and perhaps assessed in some form (though as we have noted there are critics of this assessed discussion forum approach).

5.16 Cognitive Phase (CP) Resolution

As shown in table 5.3 above, Resolution was barely found in Group B (0.58%) and of a relatively low incidence in Group A (9.12%). The sub element Wrap up was the primary type of CP Resolution found. Pointing to the pivotal importance of the nature of the prompt, a request to summarise in some form was an overt component of several tasks whereas CP Resolution Thought experiment and CP Resolution Apply/test/defend was only made explicit in one prompt. CP Resolution Wrap up type posts also tended to include metacognitive elements as CP Resolution prompts usually required participants to reflect on their previous beliefs and assumptions. The relatively high incidence of CP Resolution Wrap up may also be because the act of summarising is a more familiar type of learning activity than the other two sub-elements. In terms of task design, asking participants to defend an argument did not make sense if an individual had not formulated one during the discussion, whereas CP Resolution Wrap up could still be achieved by a participant who was posting for the first time.

Debate had the highest levels of CP Resolution (17.22%) and one possible reason for this is that the task itself can lead to a natural conclusion i.e. 'who won and why? Having invested in a debate, participants should have an authentic interest in the answer to this question. Case Study had the second highest incidence of CP Resolution (8%), which is considerably lower than that of Debate. One reason for this may have been that the mechanism of the task was less obvious for participants to pick up on. For example the following prompt for Case Study 1 attempted to guide the participants to CP Resolution defend.

Example 5.26

Zoe's teacher does not agree with your advice (he was quite angry!). Can you justify your position based on a real example from your own experience, or other sources?

However, instead of defending their own previous solutions for which they had reached some level of consensus, the group began to create additional solutions to what they conceived of as a new problem. This is another example of how an intention on the part of the moderator/task design is misinterpreted (or missed entirely) by course participants. However, it is worth noting that over time there is a steady increase in the incidence of CP Resolution for the Case Study tasks (3.33% to 9.09% to 11.67%) which may indicate that participants were becoming more aware of the implicit/explicit aims of the task design (i.e. problem, create solution, apply). Or equally, the task design itself may have improved.

In contrast with Sadaf & Olesova (2017), the PIM task design was less successful in achieving CP Resolution. As noted above this was often because the third and final prompt was often left

unanswered or ignored. One reason for this, is that of time (available to participants in one particular week) and timing (when participants are able to post during the week). For example, Group A's contributions to the forums were spread throughout the week whereas Group B's tended to begin towards the end of the week. This may have meant that Group A's discussion allowed more time for participants to read others comments and develop their own thinking before posting/reposting (as discussed in Chapter 2.36, for importance of time/timing in asynchronous discussion, see Meyer, 2003 and Akyol et al., 2011). Nevertheless, the PIM task design was not completely unsuccessful and achieved an incidence of 7.10% in Group A. Furthermore, Group B's only examples of CP Resolution came in the last module that deployed a PIM task design. This was also the only occasion that a question designed to elicit CP Resolution was asked of Group B. This perhaps underlines the importance of the moderators input i.e. there was only one CP Resolution type question asked in the entire Group B course but it elicited the desired response from two participants.

Finally, Group A Module 7 prompted the participants towards real world application (i.e. CP Resolution) following Open Discussion type prompts. However, the results were disappointing with only one example of CP Resolution coded in this transcript, and this was not even related to the real world application prompt.

5.17 Cognitive Phase (CP) Triggering

CP Triggering was infrequent for both group A (3.53%) and group B (2.31%). Similarly, task design appeared to have no impact on the incidence of triggering codes (see table 5.11 in Appendix 10). These findings are in line with other Community of Inquiry research, for example, Richardson & Ice (2010). Darabi et al. (2011) had a far higher incidence for their 'scaffolded' task design (29.4%), but this task explicitly required participants to raise questions. This again points to the importance of the design and mechanism on subsequent nature of discussion and from that cognitive phase.

Hosler & Arend (2013) provide numerous examples of prompts designed to elicit the three cognitive phases of Exploration, Integration and Resolution. Similarly, CP Triggering amongst participants came in a variety of forms. As we saw in Example 5.24 above (Participant 15), this could be a question which had the potential to elicit a higher cognitive phase. This is also seen in the following example.

Example 5.27

Participant 11: Dear Participant 20

That sounds like a very tough challenge indeed. Wow...14 kids and 8 showed clear signs of ADHD. I'm really surprised you managed to get any teaching done at all (at least..I assume you did). I can also see the other challenge..that the other students started copying the behaviour. I'm guess just to get some (negative) attention too). Do you know what happened to those students? And what would you do differently now, years later and after reading this module in the course?

The above received a response that continued with Exploration Personal narration, but finished with a move towards Integration Creating solution. So in this case, in terms of raising the cognitive phase of another participant/the group, it was reasonably successful. There were also examples that were more likely to elicit lower cognitive phases (e.g. example 5.28 is likely to elicit Information share).

Example 5.28

Participant 30 :What do you do in your countries? Can you force the parents to have their child diagnosed or can you, as school, have it diagnosed? If the parents do not want to have their child diagnosed my school does not do very much.

While teaching presence can come in forms that are not just questions (e.g. building on other participants posts, supported agreement/disagreement, creating solutions etc.) it is interesting to note that of 24 incidences of CP Triggering in Group A, 15 of these came from just two individuals (Participant 11 and 15). The following exchange between these two participants and Participant 30 is a good illustration of a shared teaching presence within the community (the moderator was not involved in the exchange). The first post is an unprompted real world 'case study' that according to the analytical framework should be coded as primarily CP Exploration - Personal narration. At times the participant moves towards CP Integration through some evidence of integration of information from various sources (e.g. one reference to Italian law), but it is mainly a personal story about a learner. The two responses that follow were classified as CP Integration - Creating solution (although there is a form of Personal narration at the end of the third post this is in reference to the first story i.e. French and Italian law that labels it CP Integration throughout). These posts have been abbreviated but can be found in full in Appendix 6. The example will be discussed further in the following chapter.

Example 5.29

Participant 30 : It's the end of the school year in Italy and this forum is addressing a problem that has accompanied my colleagues and me since the beginning of the school. We have in our class, a fourth-year vocational school, a seventeen-year-old student who refuses to acknowledge publicly that he is dyslexic and he refuses to be helped and to be assigned simplified exercises, reading texts or tests. The Italian law is very clear about what teachers should do in such situations once the student has been diagnosed. The law says he can use any compensative tool such as calculators, dictionaries, notes: he can be given more time to complete a task, and other helps.

At the beginning of the school year, we realized that the certificate with the diagnosis dated back to when the student was in elementary school....[section omitted]

As I said, it is the end of the school year (schools will close on 9th June) and we have been trying to help him over the months. He has not been able to produce anything valid in written form and every time we tried to hear from him a lesson of his choice and according to the schedule that he had established he

refused. Most of us have tried many approaches without any results probably because we need to start from the scratch as he has never been really helped in the past. We probably should start doing things that are done at the elementary level, but since he refuses any help we are not able to help him and we probably lack the necessary competences.

I asked him to speak to a psychologist that comes regularly to school, but he did not do it. I don't know what do and my colleagues want to fail him, I am against it as I think that a failure would make him even more introverted and secluded. The colleagues seem to analyze only the school results without thinking of the psychological aspects involved.

I know that the situation is problematic but I would really appreciate any suggestion you could write me.

Participant 11

Dear Participant 30,

This sounds like a problem indeed. I suppose even teens can't get help if they don't want to. So probably the first step is getting to the bottom of why he refuses help? Very often it is fear/embarassment. Is he afraid he will looks stupid, that his peers will think he is not intelligent, what is his idea about people with dyslexia? Maybe he has an idea in his head of how people with dyslexia are and he doesn't want to be like that? I understand he might not want to talk with a psychologist because then you are (in his eyes) probably definitely crazy. Maybe all of this puts him too much in the 'problem' area and he feels uncomfortable there? I would say: have a teacher who he trusts and who seems more in him talk with him personally. Explain that being dyslexic is not a problem. Maybe come with a list of people (celebs) he knows who also have dyslexia. Explain to him that all the help is not there to embarras him or make him feel less but it is to help him. Ask him why he doesn't want to accept this help. Tell him it is logical he is a bit scared about it all and finds it all a bit weird. Explain to him where he is at now and what happens if he keeps on rejecting help. Also explain to him what could happen if he accepts help. Explain to him that accepting help is not a sign of weakness but a sign of strength and that having dyslexia does not mean you are stupid. Be there for him, listen to him. Only then can you slowly explain to him which help is handy, why it is handy, what it means for him and what he could get out of it.

Participant 15

The boy's mother might be able to bring some light to bear on this problem. Has something happened during his school career, or elsewhere, to bring this situation about? Would she be able to say or do anything to help, which is not aways the case with parents.

As to allowing the boy to pass when he has not reached the required level, that is an enormous dilemma, and I really don't know how to advise you. I have a similar case of a primary school boy with (I suspect) autism. He is being home schooled in the French national distance learning programme. He has a tutor for all his subjects except English and I suspect that he has been getting enormous amounts of help to be able to have the required marks to carry on to the following year....

...Since I am only working with the child as a private tutor, does that give me extra licence to pressure them do what I think is right? After all I have no axe to grind. It just saddens me to see this child left to his fate.

Sorry, I'm not being much help, except to let ou know that you are not alone with your dilemma.

Lastly, in terms of coding the only difficulty with identifying CP Triggering was deciding when a question was a rhetorical device rather than a 'sense of puzzlement'. This was not problematic for this study.

The following chapter will draw on the above data and findings to directly address the research questions and discuss the use of the Community of Inquiry framework as applied in this context.

Chapter Six Discussion

6.1 Introduction

This chapter will examine the research questions in light of the previous chapter's findings and the extent to which this data agrees with or diverges from the results of other Community of Inquiry research. This leads to an analysis of task questions/prompts and the potential influence of these to increase or decrease cognitive presence. The remainder of the chapter will focus on the dominant sub element of Personal narration before a final discussion of the findings in the Chapter's summary.

6.2 Research Questions

- a) Do learners studying a wholly online course engage in the higher order thinking within and through discussion that the Community of Inquiry framework posits?
- b) Do specifically designed online learning activities with particular types of facilitation and direction (teaching presence) move participants more effectively through the stages of the Practical Inquiry Model?

The data presented in Chapter Five Findings provides evidence that both research questions can be answered in the affirmative. Although there was substantial evidence of the lowest cognitive phase of the Practical Inquiry Model in both groups (i.e. Exploration), there was also significant incidence of higher order phases in Group A (i.e. Integration and to a lesser extent Resolution). Comparisons between Group A and Group B show considerable difference in levels of low versus high cognitive presence phase. An initial line of inquiry is to question if this was directly attributable to task type i.e. had Group B been provided with Group A tasks would Group B have obtained similar results? However, any comparison between Group A and B should be viewed with overall levels of participation in mind. There were on average 61.82 posts per discussion in Group A, but only 31.45 in Group B. It is not possible to directly attribute the lower level of participation to the task types deployed, though equally, it is not possible to discount that this did have some impact.

This data set is broadly in line with much other Community of Inquiry based research (see table 6.1) in that Cognitive Phase (CP) Exploration shows the highest incidence, followed by CP Integration and then either CP Triggering or CP Resolution commonly featuring in the single digit range (if at all). Note that some of these studies included 'other' non-cognitive postings (e.g. social) in the final percentages, while other research only provided the cognitive posting percentages (as is the case with this study).

Table 6.1 : Incidence of cognitive phase in Community of Inquiry framework research⁷

Researcher(s) study	Triggering	Exploration	Integration	Resolution	Other
Garrison et al. (2001)	8%	42%	13%	4%	33%
Pawan et al. (2003)	11%	66%	2%	0%	11%
Meyer (2003)	18.18%	50.59%	22.24%	6.66%	3.33%
Meyer (2004)	18.3%	27%	32.4%	19.8%	2.5%
Mcloughlin & Mynard (2009) (a)	1.05%	35.4%	44.8%	11.45%	7.3%
Mcloughlin & Mynard (2009) (b)	5.5%	67.6%	25%	0%	1.9%
Richardson & Ice (2010) (c)	3%	16%	78%	3%	-
Richardson & Ice (2010) (d)	1%	21%	77%	<1%	-
Richardson & Ice (2010) (e)	3%	36%	60%	<1%	-
Darabi et al. (2011) (f)	14.6%	48.8%	36.6%	0%	-
Darabi et al. (2011) (g)	29.4%	38.4%	35.6%	19.2%	-
Darabi et al. (2011) (h)	2.2%	46.7%	41.3%	9.8%	-
Darabi et al. (2011) (i)	6.05%	42.35%	41.28%	10.32%	-

a) "Pedagogical grammar tasks" - teachers reflect on a specific activity they had used in the classroom

b) "CALLA" - teachers read articles and then discuss implications of applying the concepts to their own teaching practice

c) Case based - participants review a case and other readings and then analyse through discussion (similar to Case Study task design for this thesis)

d) Debate - participants given 'pro' and 'con' readings and then assigned a position to defend

e) Open-ended - students read articles and then discuss implications with moderator guidance

f) Structured - series of questions designed to take participants through the cognitive phases of the Practical Inquiry Model (similar to Practical Inquiry Model tasks in this study)

g) Scaffolded - participants take role of moderator (with some training) and attempt to scaffold the discussion through their contributions and questions

h) Forced debate - participants were randomly assigned to 'for' or 'against', regardless of their own personal beliefs (as with this study)

i) Role play - participants choose role and discuss task from that perspective

⁷Unfortunately it was not possible to compare CP sub codes. Pawan et al. (2003) code down to the sub element level but they do not provide this data in their paper to make comparisons. Similarly, Darabi et al. (2011) who used the same elements as Park (2009) and this thesis, do not provide an analysis of sub element. Richardson & Ice (2010) do provide the sub element data for three instructional strategy (Case Study, Debate and Open Ended) but deploy a different framework at sub element level to Park (2009) making overall comparisons difficult.

Group A's results tend to fall more in line with those studies where different task designs were deployed (e.g. Darabi et al., 2011), which is also the more recent research. In contrast, Group B's results are more closely aligned with the earlier Community of inquiry research which did not set out with specific intent to test different task designs. For example, Group B's relatively high CP Exploration incidence of 77.1% (see table 5.3, Chapter 5.3) is similar to the Pawan et al. (2003) findings of 66% CP Exploration (as noted previously this study was with language teachers). Pawan et al. (2003) also found 0% Resolution as is the finding for Group B modules 1-10 in this study. Group B also aligns with the results of the small scale study (b) by McLoughlin & Mynard (2009) which found 67% CP Exploration and again no incidence of CP Resolution (deploying a similar task type i.e. open discussion, and also a study with language teachers).

McLoughlin & Mynard (2009), as with Meyer (2004), conclude that the wording of the initial prompt can significantly influence both the nature and level of cognitive phase found in the response (although contrasting research exists here too as others have reported that initial prompt has not influenced subsequent postings e.g. see Christopher et al., 2004). To explore the influence of prompt, we can use the same analytical framework as deployed for coding the posts/segments (see Park, 2009). Table 6.2 provides an analysis of initial prompts/questions in Group B (note: Exp = Exploration, Int = Integration and Res = Resolution)

Table 6.2 : Group B prompts classified by cognitive phase

Module	Task/questions
Module 1	How are your learners different? (Exp) How are they the same? (Exp) Mention some of your classroom practices meant to make sure you do not exclude any learners.(Exp)
Module 2	What are the problems you have faced when teaching dyslexic children in an English language class? (Exp) (If you have never been in this situation, you can try to imagine what the problems might be) (Exp) Is there anything from this module's reading and activities (or other reading you have done) which would help you to deal with this problem in the future? (Int)
Module 3	Do you have any students you think have ADHD? What is your experience with these learners? (Exp) How do they behave? (Exp) What type was (s)he - PIT, HIT or CT? (Exp) Watch this video: https://www.youtube.com/watch?v=Dd62-eLJYI Are there any strategies in the module or in the video you haven't tried yet but you could implement in your teaching? (Int) Why/why not? (Int)
Module 4	Watch this video and make a list here of the dyspraxia issues (physical/motor, learning or social issues) presented by the specialist. Do you have learners presenting these issues? (Exp) If you do, what strategies would help them? (Int)
Module 5	If you have experience of teaching a child with a visual, hearing or physical impairment share your experience. (Exp) If you haven't got any experience find

	a useful resource and share the information about it on the forum. (Exp)
Module 6	Have you taken into consideration Bloom's taxonomy when designing a lesson plan? (Exp) Think about a lesson you are going to teach and show how you would adapt activities in order encourage high order thinking skills.(Int) Do you have any tips for working with gifted and talented children? (Exp) How do you manage both the advantages and the challenges of having such learners in your classes? (Int)
Module 7	Which approach to assessment is usually used in your school – summative assessment or formative assessment? (Exp) Which do you prefer? (Exp) What strategies do you use to assess your learners with SENs? (Exp) Have you encountered any problems in this area? (Exp) What were the solutions? (Int)
Module 8	Do you have any questions or comments about autism spectrum disorders? (Exp) Do you have any students in your class who are, or might be, on the spectrum? (Exp) If so, what symptoms do they show? (Exp) What ideas from the unit do you think will be most helpful? (Int)
Module 9	Share your experiences of teaching a child with behavioural problems. (Exp) What types of behavior did the learner show in class? (Exp) How did you cope with this? (Int) What strategies did you use? (Int) Did the learner's behaviour improve? (Int)
Module 10	In Unit 1 you looked at types of provision for learners with speech and language difficulties. Find out more about the provisions for learners with such difficulties in your country.For example, is there a checklist that can be referred to? (Exp) Share your findings and any experience you have of teaching learners with speech and language difficulties. (Exp)
Module 11 (Practical Inquiry Model task) Part 1	Do you have multicultural or multilingual students in your classes? Do they have any specific characteristics? (Exp) What kind of activities do you do in you classes to allow for and help multicultural/multilingual students? (Int)
Module 11 (Practical Inquiry Model task) Part 2	Can you summarise if and how your beliefs have changed as a result of this module and the entire course? (Res)

We can summarise incidence as a percentage and then compare with an analysis of Group A prompts (see appendix 8).

Table 6.3 : Actual and percentage of prompts classified by cognitive phase in Group A and B

Cognitive Phase	Group A Incidence	Group A Percentage	Group B Incidence	Group B Percentage
Exploration	14	39%	21	62%
Integration	12	33%	12	35%
Resolution	10	28%	1	3%
Total Questions	36	100	34	100%

These figures should be taken as indicative due to the ambiguous nature of some of the tasks e.g. how do you code a prompt 'debate'? In this instance it was coded as CP Integration as it should require a supported argument rather than just an opinion. Nevertheless, given the margins above we can see that Group A received more higher cognitive phase prompts and fewer lower cognitive phase prompts than Group B. Also of note is that for Group A there was a higher number of prompts than resulted in actual cognitive phase responses for CP Resolution. The same can be said for Group B with CP Integration. So as we move up through the cognitive phases the prompts become less effective i.e. the ratio for the prompt to elicit an appropriate response falls.

The preceding analysis has positioned this study amongst other Community of Inquiry research (as identified in Chapter 2 Literature Review) and highlighted the potential importance of prompt and task design. The findings for this thesis (see table 5.5, Appendix 10) show that most of the Cognitive Presence was coded as Personal narration and the discussion will now turn to focus on these 'stories'.

6.3 Exploration : Personal narration - incidence

There are two necessary questions that the very high incidence of Personal narration leads us to. Firstly, why did the participants engage in the latter to the extent that has been highlighted above (e.g. over half of the discussion word count for Group B). Secondly, and more importantly, what is the value in this for the learning outcomes of online teacher development courses? For the first question we can again refer to the wording of the task prompts and the direction that they are providing the teachers (see table 6.4). In Group A only 4 out of 11 modules explicitly asked participants to share experience in the form of Personal narration and yet this still occurred in all of the modules to a greater or lesser extent. In Group B every module explicitly guided teachers to do this. More specifically, over half of the Group B Personal narration prompts were to share their experience of a learner or group of learners (see appendix 7, table 2). In terms of task design this is understandable as the focus of each course module was a particular 'type' of learner (i.e. dyslexic, gifted, autistic etc.). Prompts to elicit Opinion were rare in both groups. In Group A Information share type prompts were the most frequent

and yet this is not reflected in the frequency with which the participants did this (i.e. Opinion had the 2nd most frequent incidence after Personal narration).

Table 6.4 : Prompts as classified by cognitive phase sub elements

	Group A	Group B
Personal narration	4	11
Information share	5	4
Opinion	1	1

As noted above (table 6.2) there are limitations in coding for sub-element prompts as the analytical framework was not designed to do this. Still, the analysis does again point to the possible influence of the task and prompt on the resulting discussion e.g. the high incidence of Personal narration in prompt and discussion in Group B. Similarly, in Group A we find that there are no Personal narration type questions asked in Debate or Case Study, which tallies with the relatively low incidence of this sub code found in these groups. However, as noted above, Personal narration did still occur in the discussion for these tasks. So while the question regarding why there should be so much Personal narration might be answered in part by the prompts, it may also be that teachers gravitate towards Personal narration instinctively i.e. is it a distinctive feature of *in-service* teacher online professional development? As this high incidence of Personal narration has not been noted in similar studies it is difficult to attribute this to online learning generally, or whether unique to teacher development (or other professions with practical focus). Redmond's (2014) study involved 36 pre-service teachers and the CP Exploration phase example provided is one of Personal narration. Except in this case it is an experience the participant had at school as a learner. So it is possible that pre-service teachers' stories will originate from being a learner rather than a teacher.

This brings us to the second and more difficult question i.e. what is the value of Personal narration to course participants? In terms of the Community of Inquiry framework, as a form of CP Exploration, it is a necessary precursor to higher order thinking. However, if the latter is rarely achieved (as was mostly the case in Group B) then the value must be questioned. An early study by Gunawardena, Lowe, & Anderson (1997:427) likened forum discussion to the type of social interaction found at face to face conferences, characterised by 'useful sharing of professional experience' or 'informal professional discourse'. As per our analytical framework, 'sharing of professional experience' would generally be classified as Exploration Personal narration. This 'informal professional discourse' is also devalued by Gunawardena, Lowe, & Anderson (1997), because it does not lead to new knowledge creation (see section 6.4 and 6.5 below for discussion around the possible importance of sharing of professional experience). However, with reference to this study, the transcripts show a general positive orientation towards the discussion forums and specifically those parts that are considered lower cognitive phase (namely, Personal narration). Participants across both groups make relatively frequent

remarks as to how important this sharing of ideas is to their learning (see example 6.1, 6.2 and 6.3).

Example 6.1

Participant 26 : I've taken a lot from the discussions and the modules this week - there were some very great practical strategies given as well as a lot of inspirational teaching. It seems there are many similar cases all over the world, not only in the students we see, but in the variety of teaching approaches and attitudes

Example 6.2

Participant 33 : I would also like to say that I am happy to be part of this great group, all these ideas make think a lot, read a lot and keep me motivated!!!

Example 6.3

Participant 11 : I'm so glad we can learn about these things here and talk with each other about it. I'm learning so much that I can also use in my approach to all of my adult students. Especially about the 'not making assumptions' and taking your cue from the students themselves.

These teachers perceived a value and while many elements expressed above are not directly cognitive (e.g. 'keep me motivated' could be described as metacognitive, while 'part of this great group' could be evidence of social presence), some are cognitive ("great practical strategies", "seems there are many similar cases all over the world", "variety of teaching approaches and attitudes" etc.). The next section will look at what cognitive value Personal narration might have had for these teachers.

6.4 Exploration : Personal narration - value

A discussion of the cognitive value of Personal narration requires a discussion of reflection in this particular context (i.e. teacher professional development). Rodgers (2002:2) notes that reflection has lost its meaning as 'in becoming everything to everybody. It has lost its ability to be seen.' He identifies four problems that are linked to a lack of definition. Firstly, a lack of clarity on how reflection is different from other forms of thought (2002:2) "Does mere participation in a study group, or the keeping of a journal, for example, qualify as reflection?". The second problem is how do you assess i.e. gather evidence of something that is so poorly defined (this is pertinent to this study as it is what the Practical Inquiry Model is purportedly allowing us to do). Thirdly, that there is no common language so as to better discuss and analyse reflection. Lastly, and very importantly given our context, when we do not know what reflection really is, "it is difficult to research the effects of reflective teacher education and professional development (e.g., inquiry groups, reflective journals, or book clubs) on teachers' practice and students' learning, an essential question that must be addressed."

With reference to the question raised in the first problem identified by Rodgers (2002) above, the answer according to the Community of Inquiry framework is that mere participation when it is signified by lower cognitive phases is not enough. For example, It is entirely feasible for a teacher to participate in a discussion forum, reject all of the ideas within it, and make no changes to his or her practice. Regarding the second problem, for this study, the Community of Inquiry framework has allowed three individuals (the coders) to assess levels of reflection and gather evidence of that from a transcript with broadly agreed results. So arguably the Community of Inquiry framework is a potential solution to the assessment of reflection 'problem'. Similarly, the language of Community of Inquiry could be viewed as a common language for levels of reflection, and certainly the three coders learnt to speak this 'language' during the coding negotiation stage. The last problem is pertinent to this study, but very difficult to measure. We do not know the real impact on teachers' practice and students learning as a result of these courses. Although there are many examples of teachers stated intention to apply knowledge gained from the course, and a handful of real examples (e.g. see Example 5.24 in Chapter 5.15) we were unable to directly observe the teachers and objectively measure the change (if any) that occurred in each classroom. This is not just a limitation of this study, it is a common problem for much teacher development and particularly fully online courses with participants located globally (although the use of video observation technologies has potential to address this - see Chapter 7.5).

While this study was not designed specifically to research the value of Personal narration to this group of teachers, we can make some initial comments. There are two distinct activities that participants will engage in: the act of writing a Personal narration and the act of reading the Personal narration of others. Rodgers (2002:16) cites the Dewey scholar Richard Prawat (2000) who points out that language is crucial to the process of collaborative reflection and can serve two purposes/benefits. Firstly for the self, it allows the individual to better formulate their own 'inchoate understanding' into thoughts that are 'more conscious and rational.' Secondly, for the community, this sharing of thoughts, experience, knowledge etc., serves others' understanding. That is, it is mutually beneficial, reciprocal and synergistic.

The benefit to an individual participant of writing Personal narration is difficult to grasp in general terms as it will depend on the level of reflection that is brought to the task (and this will not always be clear from what is written in the transcript.) However, there will at least be some degree of formulation of thoughts as per the benefit to the self outlined by Prawat (2000) above. Rodgers (2002) notes that Dewey lists three ways of thinking that are not as systematic or as rigorous as reflection. Stream of consciousness (ideas, perhaps more akin to brainstorming but could also be Personal narration), invention (essentially imagination and not factual) and belief i.e. pre-judgements. However, Dewey (1933) does admit that these other kinds of thought process can lead to questions that are then tackled by reflection. In other words, we are not delineating silos of thought process and there will be interplay between the different ways of thinking.

Reading another's Personal narration is a form of self-reflection where we expect participants to discover relationships and make connections between the writer's experience and that of their

own. It serves the purpose of affirming and valuing a teacher's own personal experience, but also allows a teacher to build new meanings and understanding through the differing perspectives of the community. It can also add to the depth of understanding, a more rounded view of for example a learner's condition than if the teacher was only reading the static course content. For example we can make a comparison with reading reviews on the website TripAdvisor. You may know that a hotel has a pool (the static course content), but reading the reviews provides a more nuanced picture (e.g. the pool is not great for kids, the rooms around the pool are less private etc.). The examples that participants share can bring the static content to life (in a literal sense - the static content is forced to meet the real world of not just the individual when they read it, but all participants). A common learning outcome as reported by participants was a new perspective on their learners. An example of this would be the realisation that perceived behavioural issues were possibly caused by certain educational disabilities. This appears to have occurred, at least in part, through the reading of other participants' Personal narration. For example, this participant relates how important the forums are for her to reflect on the course content and provide the experience that she lacks in teaching certain types of learner.

Example 6.4

Participant 30 : I think that each of us is learning a lot from what our colleagues are writing and stating in the forum. To read the posts even after we finished the topic of the week offers me the opportunity to reflect on what we have been reading. I really like to read some people's answers as they are clear, effective and very deep. They are so knowledgeable and they give me the opportunity to see new ways to face or cope with particular situations, especially since I have no experience with such students. In my opinion, this is putting into practice higher order thinking skills. In a way, this is what I generally put into practice into the classroom with my students without being aware of it. Awareness will make me think more about what I am doing and how I can do it.

The Personal narration of participants 'compensating' for a lack of other participant's experience is also mentioned in the following example.

Example 6.5

Participant 17 : Although I've never had an experience of teaching learners with ADHD before, I've learned a lot about of possible examples of extraordinary behaviour of a learner. You always have to be ready to analyse different peculiarities of learners. Thinking that somebody is just naughty is a way to nowhere in learning process. I really enjoy being on this course!

So it appears that Personal narration has played at least some role in changing teachers' actions, beliefs etc. through the sharing of experience. However, we are not reverting to cognitivist frames of thinking in which input (i.e. new theory, new practice etc.) is provided to a teacher with a resulting and corresponding output (teacher accepts theory and alters practice accordingly). This mechanistic input/output view of learning fails to take many factors into consideration, for example, a teacher's existing beliefs. The inherent difficulty in altering these

beliefs are indicated in research (e.g. see Pawan et al., 2003). So while several teachers provide unsolicited reports on their beliefs changing, we should keep in mind that this will not happen in a simplistic and uncontested manner for all participants. In other words, we must be wary of an oversimplification that every participant reading every post will alter their beliefs and approach to teaching accordingly.

Taking another perspective, reading Personal narration that includes classroom practice could lead to the reader taking said practice and then implementing it in their own class. Example 6.6 and 6.7 show the intent of two participants to do this.

Example 6.6

Participant 20 :All of the advice listed is really wonderful. I'm picking up ideas that I will definitely incorporate in my classes. I'm really happy to be a part of this!

Example 6.7

Participant 26 : Hi Participant 15 -I love the idea of the learning snake - would definitely consider this for my school (perhaps not with pre-nursery though!). Some lovely ideas!

This experimentation with other teachers' 'ideas' is potentially of fundamental importance both in terms of research into what constitutes effective Continuing Professional Development (e.g. see Joyce and Showers, 2002) but also the original intent of Dewey (i.e. the theoretical basis for the Community of Inquiry Framework see Chapter 2.31). This leads us onto a discussion of the potential value that Personal narration has for a teacher's practice.

6.5 Personal narration - value : Teacher practice

Example 6.8

Participant 14 : I enjoyed this module and discussion - I feel the ones that focus on providing practical advice are more beneficial and thought-provoking than the debate-style forum discussions.

Participant 14's view is not untypical of that found on many teacher development courses that the British Council deliver (either face to face or online). That is the preference for practical ideas of immediate relevance to the classroom. There seems here to be a disconnect between what teachers think is valuable (Personal narration in form of stories about learners or classroom practice i.e. lowest cognitive phase) and what the framework states is valuable (i.e. the higher cognitive phases). However, this is not to say that practice and 'doing' is not a part of the Practical Inquiry Model (see Chapter 2.33). In theory at least, it is an ideal realisation of CP Resolution. Redmond (2014:5) in her review of the literature arrives at a definition of reflection as "a high level process for synthesising new knowledge, perspectives and experiences with personal prior knowledge for the purposes of ongoing improvement, learning and *intelligent future actions*". Rodgers (2002) too, in his interpretation of Dewey, stresses the primacy of 'action'. With this in mind, the exchange provided in Chapter 5 (example 5.29) between three

participants illustrated the potential for 'intelligent' action to be overtly designed for in a course. Rodgers (2002: 2) cites the US National Board for Professional Teaching Standards who propose the following as indicative of 'accomplished teaching'.

"Teachers must be able to think systematically about their practice, seek the advice of others, and draw on educational research to deepen their knowledge, sharpen their judgement, and adapt their teaching to new findings and ideas" (National Commission on Teaching and America's Future, 1996)

So although the initial post by Participant 30 was of a low cognitive phase, the teacher is displaying an attitude/behaviour/competence that seems of greater value than the Community of Inquiry framework is able to account for i.e. there is more value here than that signified by an over simplistic code of Personal narration. The suitability of the framework to analyse this exchange in this context might therefore be called into question. The frame is 'missing' an event that *could* have been far more significant in terms of both the teacher's learning and the impact on a student's educational experience. Nevertheless, in terms of Dewey's original intent for Practical Inquiry to always end in action, this is a good example of how discussion forums have the potential of achieving higher order thinking but are also dealing with the very practical and 'hands on' nature of teaching (often in the form of problems that need to be solved). The perfect 'circle' in terms of the Practical Inquiry Model would be that Participant 30 takes the suggestions of the group, applies them in the real world, and then reports back to the group on the outcome (or in Dewey's terms the new experience that this teacher would then be 'in'). A tenable claim is that this would be the ideal example of a cyclical Practical Inquiry Model in action: the experience (in a classroom); a description of experience (i.e. descriptive stage of reflection or CP Exploration with collaborative initial exchange of ideas/information); the analysis of experience (collaborative reflection i.e. CP integration, creating solutions, justified hypothesis, convergence of thinking); intelligent action/experimentation via real world application in the classroom (CP Resolution apply/test/defend).

Bringing the discussion back to the value of Personal narration, we can see how the latter can be an essential part of the Practical Inquiry Model cycle. However, where the later stages of the cycle is not evident in discussion transcripts (e.g. Group B), is there any value in Personal narration? Are teachers still taking the stories and ideas and putting them into practice, reflecting on the outcomes etc. but in a non-collaborative manner? There is a possibility that the higher phases of the Practical Inquiry Model are still occurring, but they are 'out of sight' of the course itself. Reflection can of course occur without the aid of a community (internal dialogue is the crux of the matter, regardless of the extent of interaction that is also there to support, see Redmond, 2014), but collaboration enhances the quality and level of reflection in a number of different ways. For example, Rodgers (2002:16) outlines three benefits of collaborative reflection which are:-

"1) affirmation of the value of one's experience: In isolation what matters can be too easily dismissed as unimportant; 2) seeing things "newly": Others offer alternative meanings, broadening the field of understanding; 3) support to engage in the process of inquiry."

We can see examples of all three benefits in the exchange in question (example 5.29). Rodgers (2002) also suggests that collaboration requires responsibility towards others and that this can help teachers sustain the focus required to enable successful reflection whilst dealing with the demands of a typical working day i.e. membership of a community is its own motivating factor (and given the often high attrition rates in online learning, this is an important additional benefit). So while Group B participants *may* have been applying knowledge gained through the online discussion, non-collaborative reflection will likely provide a lesser educational experience. Furthermore, it could be problematic if an individual teacher lacks the experience, knowledge and understanding to make sense (and new meaning) of what happened when they experimented with x or y in the classroom. Collaborative reflection can address this potential problem.

6.6 Personal narration : summary

So in summary, the incidence of Personal narration is high at least in part because of the nature of prompts that elicit it. In terms of value, the transcripts provide evidence that Personal narration is seen as important by teachers i.e. they perceive benefits. It may also be that teachers enjoy writing these stories and so tend to do it more than a course might dictate. We looked at one exchange that illustrated how Personal narration could be an integral part of a cycle that leads to direct action in a teacher's classroom (which in turn could lead to another experience which is then reflected on again collaboratively). The exchange was helpful because it demonstrated that there was a missed opportunity for a far richer educational experience, and one that could be explicitly designed for.

We also noted that it is feasible that the last parts of the Practical Inquiry Model cycle were (or still are) occurring away from the online course community. This raises the question that although Group B appears deficient in terms of the cognitive presence evidenced in the discussion transcripts, we cannot say whether there is more 'action' and self-reflection occurring outside of the data that this study presents. Though we cannot rule this out, it seems unlikely. It may be that evidence of higher cognitive phases in transcripts is also a proxy indicator for the level of application and reflection that is occurring in the classroom. Further research could examine cognitive presence in transcripts alongside data from direct classroom observation i.e. what are the changes in teacher practice over the short and long term as a result of various levels of collaborative reflection in a Community of Inquiry.

Further, the possibility is also raised that the Community of Inquiry framework alone may not be the best frame to make sense of all that is happening in online discussion when teachers engage in CP Exploration - Personal narration i.e. the teacher's exemplary attitude (example 5.29) is missed by the Community of Inquiry framework (e.g. see Meyer, 2004 pg. 112 "Faculty may need to use a particular frame in one situation, and another in others, depending on the goals of the discussion or learning situation.")

Lastly, when deploying the analytical framework for online teacher professional development it may be helpful to adapt the sub-elements and rubric that Park (2009) provided so future studies are able to distinguish between the different forms that Personal narration comes in i.e. given its frequency, Personal narration could be divided into those that focus on a learner or learners and those that focus on classroom practice (or both when this is the case). For example :-

Personal narration (learner) - Telling a story and/or relaying a problem about a learner (either another person or the course participant as a learner)

Personal narration (classroom practice) - Describing typical classroom practice and/or a problem encountered (not related to a solution for a previously identified problem)

This could aid further research into the value of Personal narration to teachers. For example, whether these stories contribute to change in teaching practice, beliefs etc.

6.7 Discussion : Summary

Firstly, task design and questions matter. Overall, the participants in both groups, did what they were told to do. Within that constraint, both groups were able to pursue areas of their own collective interest, but the pivotal importance of the design, questioning and prompts to the direction and cognitive level of the discussion is evident. This is partly in agreement with Meyer (2004:112) who writes:-

..“the type of triggering question (if we may borrow that term from Garrison) may generate the level of response from other students. Questions created to trigger personal stories did so, and questions targeted to elicit information or higher-level analysis did so; for faculty, the solution to raising the level of online discourse may be more faculty intrusion by setting the discussion’s agenda or actively moderating the discussion, or it may mean training and rewarding students to operate at higher levels.”

With this data set it would be more accurate to say that questions created to trigger personal stories did so, along with questions that were not created to trigger personal stories. Prompts targeted to elicit higher-level analysis were less likely to achieve their objective. In short, the solution was not always ‘faculty intrusion’ and there was ample evidence in both courses of missed opportunity for participants to ‘raise’ cognitive phase. This extended also to participants attempts to collaborate (e.g. unanswered calls to the group for help/information/clarification) as well as those of the moderator. So referring back to research question (b) in Chapter 6.2 above, there is ample evidence that this is the case, but there are limitations. Task design (i.e. one part of teaching presence) is pivotal, but other factors will impact on how effectively participants move through the cognitive phases. For example, the same set of designs used with participants that were poorly motivated, with less teaching/online course experience, difficulty in expressing themselves in English etc. would be less successful. In other words, affirming research question (b) is not a claim that these designs are a panacea for various other barriers to effective online collaboration. However, this data does confirm the Garrison et al. (2001)

assertion that when certain contextual and background conditions are satisfactory, teaching presence *will* make the difference.

In this study, Personal narration was dominant. The findings suggest that Personal narration can be reduced through the use of different task types e.g. Debate and to a lesser extent Case Study. However, even when the prompt or question does not seek to elicit Personal narration, participants are still inclined to produce this type of text. So if we use tasks with a natural 'mechanism' geared towards higher cognitive phases and no explicit instruction for teachers to share experience, we will still induce the latter, but potentially at a more equal level. If we are thinking purely in terms of higher cognitive phases then this would appear to be a basic design principle to follow i.e. do not direct teachers to share experience because they will naturally do this anyway (and the extended time they spend doing this may mean that they do not have the time to engage in higher cognitive phases). However, design of online learning will also be influenced by other requirements, such as variety in task type to help maintain the participants motivation and interest. It would be counterproductive to ask participants to only engage in debate for a three month course. We have also discussed how Personal narration may have more value than the Community of Inquiry framework allows for (e.g. the extent to which new ideas conveyed in Personal narration were actually taken up by teachers, or the impact on teachers' pre-existing beliefs). As noted in Chapter 2, Cleveland-Innes & Campbell (2012) attempted to introduce an 'emotional presence' and Garrison (in Anderson, 2016) did admit the prevalence of emotion in online learning. Further study of the role Personal narration (specifically by teachers) has in terms of the emotional could be a useful direction for enquiry.

In contrast with some Community of Inquiry framework research (see table 6.1), there was considerable evidence of CP Integration occurring, although this was principally in Group A. Group B's Module 10 has the lowest frequency of posts (n.16) and 0% CP Integration, which raises a question around whether there is a critical mass (i.e. minimum number of postings) required before CP Integration can realistically begin to occur. However, it should also be noted that Group B's Module 2 also achieved 0% CP Integration through a higher number of posts (n.34). In other words, poor contribution to the forums was not the only barrier to higher cognition in Group B. Serial monologues (see Pawan et al., 2003) could be described as the antithesis of CP Integration, and there was evidence of this phenomena occurring sporadically in both groups. A possible indicator of a tendency for participants to see the course less as a collaborative venture is the preponderance for participants to begin their posts 'Dear Moderator'. Still, there was considerable interaction alongside these hermetically sealed posts, so unlike Pawan et al. (2003) this would not be the prime criticism of the educational experience for either group.

Unlike CP integration, CP Resolution rarely developed organically (i.e. without a prompt directly provided in order to elicit this cognitive phase) and there was sometimes an artificial or abrupt nature to which the participants were 'led' there i.e. the discussion had not always reached a clear convergence of ideas in the CP Integration stage before participants were guided towards CP Resolution. Further, where CP Resolution did occur it was often a case of the 'usual suspects' i.e. those that contributed the most to the course from start to finish (both in terms of

frequency and interactivity) and whose contributions had always shown the highest cognitive presence. For example, in group A two individuals (Participant 11 and 15) were responsible for 41.94% of the CP Resolution segments. Therefore, the extent to which the group could be said to have achieved CP Resolution is unclear. While the Community of Inquiry is a collaborative venture (and therefore too much overt focus on individuals in the group would be moving away from the entire premise of the framework) you cannot escape the fact that the teachers in both groups were operating at very different levels of development. If you removed three or four of the high frequency, more reflective posters in Group A (e.g. Participant 11, 15, 19 and 33) then the ebb and flow and overall shape of the discussion would have changed significantly. There is an obvious tension here in that a Community of Inquiry can only ever be the sum of its parts, but if the part(icipant)s have not previously been required to think critically, then achieving the higher cognitive phases of the Practical Inquiry Model will likely be a more difficult proposition. That is to say that the individuals in these groups did not come with the same experience/skills/aptitude for learning in this context, and they almost certainly did not take away the same from the course i.e. they will have benefited more or less from the various aspects of the course (be it static content or types of dynamic content). In terms of the research questions for this study, these are background factors, but will have had their own impact on the cognitive phase evidenced.

Clearly, further work needs to focus on how to increase CP Resolution and therefore 'complete the circle.' No task that was deployed consistently led to a natural occurrence of CP Resolution. Case Study was a more effective mechanism for collaborative solution creation, but fell short of the subsequent application of this solution to the real world. There is an element missing here that needs further design. Arguably, Debate has the more natural mechanism and as noted in Chapter 5 it would be useful to explore if this could be designed with a more practical bias that results in a classroom application. Meyer's (2004) suggestion of 'training and rewarding the students to operate at higher levels' (i.e. addressing the metacognitive) would certainly have worked for some individuals, but may have been too high a demand on others. A few participants surfaced as potential candidates for a more formalised and shared teaching presence (e.g. Participant 15 and Participant 11), and embedding this in an explicit task design would have been an interesting direction to pursue (e.g. as per Darabi et al., 2011 and the scaffolded tasks that found the highest incidence of CP Resolution). As noted in Chapter 2, Pawan et al. (2003) and Shea et al. (2010) question whether online discussion in a forum is the right 'space' for CP Resolution to occur (i.e. in the same way that we would not expect face to face oral classroom interaction to consistently achieve CP Resolution). However, removing the possibility of CP Resolution in online collaboration would necessitate a complete re-modelling of the Community of Inquiry framework. While the data from this study would not be able to categorically reject this course of action, the relatively high Debate incidence of 17.22% suggests that further CP Resolution focused research would be worthwhile.

Lastly, An evident problem for the participants is time (see previous example 5.9) and the identified 'missed opportunities' were perhaps never an opportunity in the sense that the participants only had a certain amount of time in their working and personal life to commit to this

course. Participant 11 notes that a lack of time appears to be impacting on both lower (remembering, internalising) and higher order thinking (going deeper).

Example 6.9

Participant 11..... Which brings me to a question for all of you: I notice my head seems to be slightly saturated. This is probably because a lot is going on, I have lessons, busy with planning other things etc. However, I notice that I do the units and mostly battle with doing them in time. My main objective at the moment (because of life) is finishing in time. But I notice that I'm not remembering, internalising or going deeper as my head is just getting too much information.and it can't process/do something with it in the space provided. Am I the only person who is trying to work with this? Just curious.

Linked to another aspect of time, we noted that the timing of when participants posted during the week possibly had its own impact. Group A posted throughout the week allowing more time for discussion to develop, whereas Group B tended to post in a concentrated burst at the end of the week. It is difficult to measure the precise impact of this on overall cognitive presence through this study design, and would need to be investigated in a separate study.

Chapter Seven Conclusion

7.1 Introduction

This chapter will begin by outlining the limitations of this study before returning again to the research questions for final comment. The section following this will summarise the framework's value when applied in this context; what was learnt whilst addressing the research questions and what additional questions this has resulted in. The penultimate section will discuss future research aimed specifically at increasing the incidence of Cognitive Phase (CP) Resolution in online professional development for teachers. The thesis will close with some concluding remarks on the significance of this study to the field of online learning.

7.2 Limitations of the study

There are a number of limitations to this study. As noted in Chapter 6.2, any direct comparison between the groups should be made cautiously as participation levels were far higher in Group A than Group B (and it would be difficult to justify a claim that the different levels were primarily due to the deployment of different task types). This raises the question as to whether there is a critical mass of posts required for the higher cognitive phases to occur. Or put another way, how can participants integrate ideas/knowledge etc. when there are insufficient postings to take on further and build on? So while the lower levels of participation in Group B do not invalidate comparisons, the ideal of roughly similar participation levels was not realised. Also, although the teachers' 'characteristics' were controlled for each group (as far as it is possible to do this) and the participants were chosen from same overall population, there are many other factors that could have influenced the results rather than purely task design/teaching presence e.g. if Group A's participants had more time available to spend on the course than Group B. This type of concern is less of an issue when we make comparisons within a group (i.e. Group A) and across the different sub-sets of tasks where we know that we are dealing with the 'same' participant in terms of motivation, experience, time available etc. Though here also, we might question to what degree modules can be said to exist in isolation. For example, if a group has already achieved higher cognitive phases in earlier modules, are they more likely to achieve higher cognition in later modules? Does an earlier task impact the way participants behave in later ones? Do the participants strive for higher cognitive phases because they have been required to attain them before? However, the patterns shown in figure 5.1, Chapter 5.2 (i.e. no clear incremental increase in higher cognitive phases as the course progresses) would suggest that this was not the case.

How far we can generalise from these findings is also in question as discussed in Chapter 4.4. The study population was unique in many respects and is likely to have contained learners who were highly motivated and already what might be termed 'reflective practitioners'. Not all teachers encountering online learning will fall into either of these categories. We have discussed the validity of the framework and its application in Chapter 4.2 and as with most research of a qualitative nature we cannot hide from the multiple acts of interpretation that exist between the reader of this thesis and the original data. Lastly we saw in Chapter 6.5 the possibility that

cognitive presence is occurring 'outside of the frame' i.e. relying on the discussion transcript as a single data source could be problematic.

7.3 The research questions

The aim of this thesis was to establish if higher levels of cognitive presence were evident in online discussion forums (as a fundamental theoretical basis of the Community of Inquiry framework) and whether these levels could be positively influenced by particular task designs. The findings showed that in Group A the answer was affirmative for both. Overall, the data from Group A tends to confirm the Garrison et al. (2001) assertion that task design and teaching presence can positively influence the incidence of the higher phases of cognitive presence. However, some of the data collected in this study, predominantly that of Group B, could also be used to validate the critique of the Community of Inquiry framework (i.e. that higher cognitive phases do not occur in online discussion). Furthermore, even within Group A, there was evidence of online collaborative learning that did not appear to take participants cognition 'full circle' as per the ideal realisation of the Practical Inquiry Model. While the Case Study and the Debate task designs provide a mechanism that encourages higher phase reflection (be it fully collaborative or less so), the picture was certainly not one of uniform success. An ongoing concern is that achieving the final Resolution phase that the Community of Inquiry framework requires, is inconsistent. The question remains as to whether this is just a matter of further attention to task design (and moderator facilitation) or whether the discussion forum space is not the ideal environment for this to occur (see section 7.5 below).

7.4 Applying the framework

How did the Community of Inquiry framework 'perform' in this context? An untrained, casual observer flicking through the transcripts would easily deduce that there was a difference between the two groups and the level of 'reflection' that was occurring. Applying the Community of Inquiry framework allowed the coders to gain insight into some of this difference and provide a basis for analysis. Firstly, there was reaffirmation of knowledge claims made by previous research. For example, through analysis of the task prompts via the Community of Inquiry framework we found that these can either limit or increase opportunity for participants to move towards higher cognitive phases. In short, questions and prompts are critical. Linked to this we saw the influence of task design and how inherent mechanisms may guide participants towards more reflective thinking. Secondly, there are knowledge claims made that are more unique to this thesis. For example, the very high incidence of Personal narration found is not commonly noted in other Community of Inquiry framework research and determining whether this is something that is unique for in-service teachers or other professions with a practical focus could be of future research interest (it is also important to replicate the findings of this study to see if this itself was an anomaly or specific to this context/this population). Further, while the Community of Inquiry framework devalues Personal narration as low level, less reflective thinking i.e. Exploration, the teachers derived benefits. For example, some teachers encountering other's Personal narration saw this as compensating for a lack of personal experience of SEN learners. Others planned to take ideas embedded in Personal narration and

implement in their own classroom practice. Further research should examine Personal narration to unpack the functions it performs and the consequent value attached e.g. to what extent does it impact on teachers' behaviour and beliefs, or what purpose (if any) does it serve in terms of the emotional (i.e. social presence)? Once more is known about the value of Personal narration then the design of courses can intentionally aim to increase or limit the degree to which it occurs (and when it occurs) through individual task design (e.g. we saw that deploying a debate type design reduced both Exploration and Personal narration significantly). This would be an improvement from the current state of affairs where educators may be encouraging Personal narration without a particular learning outcome in mind. Here we can see how the Community of Inquiry framework has helped identify a phenomenon which could, with further research, result in a tangible practical outcome i.e. new design guidelines. Thirdly, an additional knowledge claim that this thesis makes is the potential for the online task itself to be *the message* i.e. loop input, an approach more commonly used in face to face teacher training. Typically this means that teachers engage in a task (e.g. debate) and experience it from the perspective of a learner. The teacher is therefore in a better position to understand the task type, activity, approach etc. before implementing in their own classroom. There is potential to exploit this methodological technique further with prompts that require post analysis of the task type and subsequent application (i.e. resolution) in a classroom. Lastly, the Community of Inquiry framework may be a useful tool deployed in the design of online learning tasks/prompts e.g. as undertaken in this study, designers could code their intended task design prompts before a course begins to ensure that there is a balance of cognitive phase 'elicitation'.

7.5 Classroom application and CP Resolution

Returning to the aforementioned issue of achieving CP Resolution, Chapter 6.5 discussed whether the best place for CP Resolution for a practicing teacher is not in a forum, but in the classroom. In other words, instead of vicarious application in 'real world' (such as may occur in a case study task design with subsequent discussion), there is the opportunity for teachers to achieve Resolution through *real* experience. As noted, this still aligns with the theoretical basis of the Community of Inquiry and is alluded to by one of the frameworks' authors, "The proposed solutions can be tested in practice, where the learners 'apply the newly gained knowledge to educational contexts or workplace settings' (Garrison & Arbaugh, 2007, p.161)". Importantly for this context, this type of active experimentation is evidenced as more likely to deliver sustained and effective change in the classroom with improved learning outcomes for students (Joyce & Showers, 2002). Envisioned like this, Community of Inquiry would appear to offer a suitable theoretical framework to 'contain' both direct practical experimentation in class and collaborative reflection on said experimentation. Placing this thesis in the context of current trends, video observation technologies are becoming increasingly common in teacher development programmes. These technologies may provide the missing mechanism that pushes teachers more naturally towards CP Resolution e.g. a task design would begin with forum discussion of a common classroom problem or methodology (i.e. exploration), to creating a solution (i.e. integration) to application via video based peer observation and collaborative reflection on each participant's videoed practice (i.e. resolution). Future research would be able to compare this task type with debate, case study and other new designs. This would establish if direct

classroom application with collaborative reflection is able to provide a more consistent and natural progression to 'resolution' than was often absent in this study.

7.6 Concluding remarks

As educators we have a responsibility to create the conditions that enable the richest possible educational experience for learners. The contribution this thesis makes in terms of online learning practice is to underline that responsibility. Simply put, it is not enough to rely on the dynamics of online collaboration and socio-constructivism as a basis for repeated successful educational experiences. From a personal perspective I am encouraged by the findings of this thesis. I would conclude that as a professional in this field I can add value at the design stage and that there is therefore tangible meaning to my current role and more broadly the field I have worked in for the last seventeen years.

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The British Council's special educational needs approach

What is the British Council's approach to special educational needs (SEN) and inclusion?

The British Council positively promotes a **social model** of disability, assuming differences are a normal part of diversity, and that teaching must be adapted to the needs of the learner. The social model emphasises that society needs to adapt to the individual and it begins from the needs of the learner in overcoming barriers to learning. This is different to a **medical model** of disability where the impairment or disability is defined as the problem.

Inclusion means ensuring access to learning and school curricula is available for all learners whatever their learning challenges. Successful teaching and learning celebrates all learners and promotes the contribution that all learners bring to learning. In this sense, inclusion is in the interest of everyone and everyone's unique contribution is equally valued.

What do we mean by special educational needs and inclusion?

The term special educational needs (SEN) covers a wide range of learners who have a learning difficulty which calls for special educational provision.

These include:

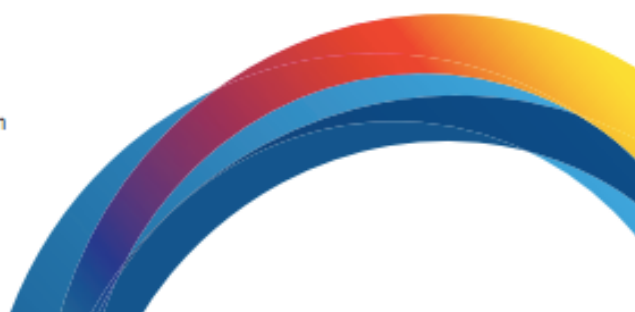
- learners who have a much greater difficulty in learning than the majority of learners of the same age
- learners with a disability which hinders them from making use of the general educational facilities provided for learners of the same age
- learners who need extra provision because they have abilities significantly ahead of their peers.

While inclusion often means learning will be most effective in the same class or group, we need to consider what specific learning support and interventions are most appropriate in individual contexts.

What does the wide range of special educational needs (SEN) include?

Special educational needs is usually understood to include:

- a. cognition and learning: dyslexia, dyspraxia, dyscalculia
- b. behavioural, emotional and social development needs: learners with challenging behaviour
- c. attention deficit hyperactivity disorder (ADHD)
- d. communication and interaction needs: speech, language, intellectual and communication needs
- e. autistic spectrum disorder (ASD) – Asperger's syndrome
- f. sensory and/or physical needs: visual, hearing and physical impairment
- g. gifted and talented learners, and learners affected by global cultural movement and displacement.



However, it is important to understand that the wide range of learners will include those who have not been identified as having SEN and may otherwise have just been regarded as 'slow' or poor learners. It is often the case that learners have a variety of challenging needs that require support. It is important to understand that this is likely to be a significant section of any learning population.

Is there a danger in labelling learners with special educational needs?

Understanding where specific learning challenges come from is important, and the more teachers know about specific needs, the more they will have the skills and knowledge to offer specific support. Labelling is, however, for bottles and packets and not people!

An inclusive approach will target specific interventions and address the needs of all learners. This will usually involve maximum variety in learning, playing to individuals' strengths and multisensory approaches.

How can schools and teachers effectively support learners with special educational needs?

It is most important to understand that usually a change of **attitude** in how teaching and learning is organised is more significant than a focus on **expensive resources**. The ideal scenario is an **integrated school approach** where there is a **whole school policy** in support for SEN which begins at **school leadership** level. Co-ordination between **professionals** (educational psychologists, speech therapists, behaviour management specialists, etc.) and teachers is an essential ingredient for success.

Good practice would also suggest that there is a Special Educational Needs Co-ordinator (**SENCO**) on the staff and **learning support assistants** at class level. It is often said that SEN is too important to be left to the 'experts'. The real experts are teachers, parents and the individuals involved who must be the significant part of any decision-making process.

Is it the teacher's role to diagnose special educational needs?

It is definitely **not** the teacher's role to diagnose SEN unless they are specifically qualified and trained to do so. That is the role of professionals. It is the teacher's role to notice and identify where there are specific learning challenges and how best to support the meeting of learning outcomes and objectives.

The British Council's TeachingEnglish Special Educational Needs training course

The **TeachingEnglish** Special Educational Needs training course has been designed to support teachers faced with the reality of a diverse classroom with a range of learning needs. It will cover all the issues mentioned here, with a specific focus on:

- how to train teachers to create an inclusive learning environment and how to develop the skills to meet the diverse needs of each learner in a class or other learning communities
- knowing what to do, who to approach and which procedures to follow when teachers notice a learner with greater difficulty in learning than other learners of the same age
- how to notice and respond to learning difficulties that result from SEN and implement effective teaching and learning strategies
- how to train teachers who are teaching SEN learners in supporting them in reaching their true potential
- demonstrating how appropriate teaching and learning methodologies are in the interest of all learners, especially as many learners have unrecognised and unmet needs leading to learning difficulties.

Overall the course is intended to raise teachers' awareness of special educational needs and learning challenges and to provide practical strategies – though every situation is specific and it is up to the teacher to apply what is appropriate in context.

www.teachingenglish.org.uk/teacher-training/special-educational-needs

Appendix 2 Participant details

ID	City	Country	A/B	M/F	Online Exp	Age	English L1	Yrs Exp	Qual	Qualification	High Qual
1	Lima	Peru	A	Female	Yes	61	No	30	Yes	Teaching English as a Second Language- Universidad Pacifico	High
2	Santiago	Panama	B	Female	Yes	54	No	14	Yes	TESOL Postgrade	High
3	Tanugup	Myanmar	A	Female	Yes	38	No	11	Yes	Dip in English Language Teaching (Yangon University)	High
4	Moscow	Russia	B	Female	Yes	48	No	10	Yes	university diploma in teaching history, and English	High
5	Delhi	India	A	Female	Yes	50	No	28	Yes	Bachelors and Masters in Education	High
6	Istanbul	Turkey	B	Female	Yes	34	No	12	No		
7	Dubai	UAE	A	Female	Yes	32	No	12	Yes	Bachelor of Education and Master of Arts in Education	High
8	Delhi	India	B	Female	Yes	53	No	31	Yes	BACHELORS IN EDUCATION and MASTERS IN EDUCATION	High
9	Izmir	Turkey	A	Male	Yes	38	No	2	Yes	CELTA	
10	Bursa	Turkey	B	Male	Yes	30	No	3	Yes	BA in English Teaching and online training course	High
11	IJmuiden	Netherlands	A	Female	Yes	41	No	5	Yes	TEFL, ACTDECT level 5 TEFL, Business English & Young Learners, online tutor supported courses	
12	Gladstone	Australia	B	Female	Yes	48	Yes	15	Yes	14 subjects towards a Bach of Ed, a lot of PD relating to teacher aide	
13	Manouba	Tunisia	A	Male	Yes	39	No	14	No		
14	Archidona	Spain	B	Female	Yes	60	Yes	1	Yes	CELTA	
15	Sousse	Tunisia	A	Female	Yes	70	Yes	30	Yes	Trinity College Licentiate Diploma in TESOL, PG Dip Sheffield Hallam University	High
16	Mandalay	Myanmar	B	Female	Yes	31	No	10	Yes	ELTCs certificates	
17	Kyiv	Ukraine	A	Female	Yes	37	No	12	Yes	Master Degree in teaching English and Literature (Pedagogical University)	High

18	Oulu	Finland	A	Female	No	27	No	5	Yes	English language and special needs		
19	Ibague	Colombia	A	Male	Yes	67	No	0	Yes	First Certificate- TKT-		
20	Versailles	France	A	Female	Yes	50	Yes	10	Yes	CELTA,TEFL		
21	Kherson	Ukraine	B	Female	Yes	46	No	24	Yes	Ist category		
22	Ganja	Azerbaijan	B	Female	Yes	29	No	7	Yes	TEFL		
23	Dar es salaam	Tanzania	B	Female	Yes	32	No	5	Yes	diploma in secondary education		
24	Khairpur	Pakistan	A	Female	No	26	No	3	Yes	M.A TESOL		High
25	Bologna	Italy	B	Female	Yes	40	No	6	Yes	EFL Certificate		
26	Hong Kong	Hong Kong	A	Female	Yes	39	Yes	16	Yes	Trinity Cert TESOL, Cambridge DELTA, MA TESOL		High
26	Thessaloniki	Greece	A	Female	Yes	48	No	20	Yes	Diploma in TESOL, PGCE in TEL		High
27	Hanoi	Vietnam	B	Male	Yes	36	No	3	Yes	Bachelor of English language teaching		High
29	Kuala	Lumpur	B	Female	Yes	60	No	27	Yes	Masters TEFL Diploma and Masters of Education (M.ED)		High
30	Catania	Italy	A	Female	Yes	58	No	30	Yes	Italian School Qualification by national contest, PhD. in Linguistics with a specialization in Second Language Acquisition and Teacher Education -University of Illinois at Urbana-Champaign, Master of Arts with emphasis in TESOL University of Southern Mississippi, Hattiesburg USA		High
31	Guarujá (São Paulo)	Brazil	B	Female	Yes	53	No	23	Yes	Bachelor's degree and a post-graduate specialization on Psychopedagogy.		High
32	Jedah	Saudi Arabia	B	Male	No	51	Yes	30	Yes	Post grad		High
33	Elefsina	Greece	A	Female	Yes	54	No	26	Yes	Ciselt		
34	Kabul	Afghanistan	B	Male	No	29	No	3	No			
35	Bodrum	Turkey	A	Female	Yes	29	No	3	Yes	Teaching degree		High
36	Aguascalientes	Mexico	B	Female	Yes	45	No	12	Yes	Teacher's Certificate (SEP), TKT Modules 1,2 and 3, TKT-YL		

Appendix 3 Moderator role profile



E-moderator main duties



Job Title	E-moderator	
Directorate or Region	Flexible Location	
Location of post	Based in current country of residence	
Reports to	Project Manager	
Purpose of job		
To plan and deliver quality e-moderation for Teaching for Success.		
Accountabilities		
Support British Council's global English strategy by <ul style="list-style-type: none">▪ delivering e-moderation to the highest standards of ELT▪ enhancing British Council's reputation as a world authority in ELT, particularly in the area of e-learning▪ continuing professional development and sharing of best practices		
Responsibilities		
<ul style="list-style-type: none">▪ Ensuring e-moderation meets learner needs and expectations▪ Ensuring e-moderation meets British Council Teaching Quality Standards and organisational expectations		
Main duties		
1	Plan, prepare and deliver high quality e-moderation that meets the needs of course participants, taking into account the participants' educational context. E-moderators are given moderator notes to populate forums and wikis and as a guide to facilitate discussions online. Initially, E-moderators will be required to do some basic troubleshooting and give technical support to get participants online. Each forum needs managing to ensure learning outcomes are met and when assignments form part of the coursework that E-moderators will mark, individual feedback ought to be given within a reasonable, agreed timeframe.	
2	Liaise with relevant trainers, senior trainers and the project team. In blended programmes , work regularly with face to face trainers to actively promote both the online and face to face components for shared groups. Discuss specific learners together to make informed decisions about shared groups.	
3	Monitor progress and provide regular feedback both to course participants and their face-to-face trainers (if blended) to help manage performance throughout the course, and actively promote online participation. E-moderators are required to extract reports on participation and grades and also write personalized feedback for course participants.	

4	Complete all project related administrative tasks to specified standards, with particular reference to reporting on grades and participation.
5	Support local marketing and promotional strategy, and assist the project team in delivering excellent customer service.
6	<p>Ensure safeguarding and guidelines are applied and upheld in line with standards and policy for the following areas:</p> <ul style="list-style-type: none"> ▪ Child protection ▪ Equal Opportunity and Diversity ▪ Health and safety
Key relationships:	
<p>Relationship building is a core component of the work in developing strong, trusting relationships with teachers, school administrators and leaders, and British Council colleagues.</p> <p><u>Internal</u></p> <ul style="list-style-type: none"> ▪ Face-to-face trainers (if applicable) ▪ Academic management team including Senior Trainer/teacher and Project Manager <p><u>External</u></p> <ul style="list-style-type: none"> ▪ Course participants 	

Appendix 4 Permission to research online data



Dear teacher,

We would like to conduct some research into the online *Applying approaches to special educational needs* course that you have requested to study. The aim of this research is to examine participation and engagement in an online course for teachers.

Here is a description of what the research will involve:

- Two or three groups of between 20-40 teachers are being asked to participate in the research.
- The research will start after consent is given and will continue until the end of the course.
- To participate in this research you do not need to do anything other than to complete the online course as you would normally. After the course has finished we may ask to interview you to find out more about your experience. The interview will be via Skype or Zoom.
- Data from your activity on the online course (e.g. contributions to discussions, responses to tasks etc.) will be collected and analysed. The data will be analysed by a researcher and may be published but all reference to data will be anonymous.
- Privacy and confidentiality: Your personal details will remain private and confidential. These will not be shared with any other party.
- The data from the online course will be stored for a maximum of three years after the course finishes.
- If you give your consent now you can still change your mind at a later point. In other words, you can withdraw consent whenever you choose.
- There are no known risks to you in participating in this research.
- The results of this research will be used to improve future versions of this course. Although you will not benefit from such improvements, we hope that what you learn during the course will be of immediate benefit to your work.

If you have any further questions then you can contact Adam Edmett adam.edmett@britishcouncil.org by email, or call 08613701142410.

Consent form

'Applying approaches to special educational needs' research April 2017 – July 2017

I have read the information about the research ☐ (please tick)

I give permission for the researcher to collect and analyse my online data ☐ (please tick)

We may also invite some teachers to tell us more about the online course experience.

I would be happy to be interviewed ☐ (please tick)

Name _____

Signed _____ date _____

Researcher's name: Adam Edmett

Signed _____ date _____

Appendix 5 Course assignment (Part one and Part two)

APPROACHES TO SPECIAL EDUCATIONAL NEEDS

Assignment: Part One (500 – 1000 words)

As you study the course choose one aspect of the content that you would like to take into your classroom and experiment with.

Identify why you want to use it? Why are you interested in this area?

After your experiment please reflect on how well it worked? Would you do this again? Why/why not?

If you are not currently teaching then you can conduct a thought experiment and imagine how learners you have previously worked with would react.

Assignment: Part Two (500-1000 words)

After you have finished all of the course content consider the following scenario.

You are a newly appointed SEN adviser to a private language school in a middle income European country that has a traditional, conservative view on schooling and Education. The majority of the teachers have had no formal training in the field of Special Educational Needs. Parents have been demanding provision for SEN and this is the reason for the school bringing you in (most of the children come from the small town that the school is in and the parents are quite active in their support for the school). There have been problems in the past with SEN – a teacher wrongly diagnosed a child last year and the parents were furious and threatened legal action against the school. On another occasion a child who later found to be autistic had been subjected to a series of punitive actions by the teacher (detentions, extra homework etc). Two years ago the school introduced an anti-bullying campaign as an external report identified a school culture that did not value diversity

The schools principle has asked you to write a message to all the school staff on the priorities for the coming year. This should include identified problems, planned solutions and how you would win over cynical colleagues.

Appendix 6 Example transcript (Group A : Module 2)

Module 2 - DYS - Unit 3 (GrA)

Hi all.

After having completed the 3 units of the module, read the case study attached to this post and then answer the following:

Can you identify any problems with this teacher's approach to the situation?

Is there anything that you've read in this module (or elsewhere) that helps you understand the situation?

What advice would you give to Zoe's teacher?

Participant 19

Dear **Moderator** and colleagues.

I think the teacher hasn't done any special approach to Zoe's problem. From what I have read in this module, it seems to me she has got dyslexia, as she is very good at other activities but writing, perhaps Zoe's teacher should plan some activities for her alone and probably using the colors strategy will help her to organise sentences better. It's also a good idea to talk to her, her parents and the director of the school to try and find a solution to help her. Instead of advising her to do some reading with her parents, he should try and spend a few minutes with her to help her improve her reading there in school.

Moderator

Dear **Participant 19**,

Can you highlight the signs of dyslexia you can identify in what Zoe and the teacher say?

Participant 19

Sure, **Moderator**. Her signs of dyslexia are her poor written work as most of the times she writes nonsense things and her excuses to show her written work make me feel that she doesn't want her written work to be seen. That also proves she knows she has problems with her writing and she doesn't want to be ashamed. She is very intelligent and does well in other activities. She also has problems with punctuation. In addition, she also has problems with reading and copying from the board.

Participant 15

We are not told Zoe's age, and we learn later on in the teacher's remarks that she has just changed schools. If she has changed schools, then any problems she is displaying now may be partly due to the change. Changes in routine can be very stressful for any child, and even more so for special needs children.

Later in the teacher's remarks he says, "Perhaps her previous school didn't focus so much on writing but I think it's crucial for language learning." He then goes on to say that he has been keeping her after class and has asked her to do extra reading at home with her parents, and continues by saying he doesn't think that it is being done.

From the two texts, it seems that Zoe ticks a lot of the boxes showing the signs of a dyslexic child. Her written work is of a very poor standard with bad punctuation and spelling, and doesn't make sense. Zoe complains about the difficulty she has in copying words from the board, and how difficult she finds in expressing her ideas on paper. She

also seems to be lacking in self-esteem as she has no work displayed on the wall, and is dreading the day when she will have to read out loud in class. The teacher has noticed that Zoe lacks concentration and sometimes distracts others sitting nearby, and implies that she is lazy and makes excuses about her homework, although he recognizes that she is bright and joins in oral work.

Perhaps the teacher's apparent lack of concern is because Zoe is new in his class, and he doesn't know her very well, and also he may not be particularly aware of the signs of conditions such as dyslexia.

In my view, his first action should be to meet Zoe's parents to find out about her level. He should also discuss her with any other teachers Zoe may have in the school. As we know that several of the strategies we can adopt with dyslexic children are also good general class practice, the teacher could perhaps adapt his teaching style a little to accommodate Zoe. He could prepare handouts of vocabulary as far as is possible instead of writing on the board, and make sure that her homework assignments are written in her notebook either by himself or by a classmate. He could make sure that Zoe is called on to display her oral work, and make sure she is praised for good work.

He should have a chat with Zoe, who might be able to explain how she feels about things such as reading out loud and not having work displayed, but I think it better to speak to her parents beforehand to see what light they can throw on her school work and general behaviour.

It is evident that the teacher has not made any connexion between Zoe and dyslexia, otherwise he would realise that asking her to do extra reading at home is not a solution, as her parents will probably have no idea as to how to help her. The teacher needs help from colleagues or other professionals in order to learn how to deal with Zoe's difficulties.

Participant 26

I agree with **Participant 19's** succinct and eloquent statement! Zoe displays many of the characteristics of a dyslexic learner. The teacher has shown this through his own observations but hasn't taken beyond his own ingrained thoughts on learners / education. There's some evidence of negative labelling already without really getting to the root of her issues as a learner, e.g. daydreamer, distraction. His approach in general is fairly limited - keeping her back, quite conservative / outdated views to school work ('writing is crucial for language learning'), extra reading, etc. What Christine suggests is a good start; talking with Zoe first and changing the format of assessment, as well as getting in touch with her parents, colleagues. I would also add: giving positive encouragement and praise, changing the method of instruction to demonstrate activities, giving the class vocabulary lists on coloured paper, more kinaesthetic / visual activities & aids, and allowing for more peer / group work & interaction to enable Zoe to discuss her ideas with others as there isn't an issue with her verbal skills, this would also help her process information better. Adopting a multisensory approach has proven very beneficial for dyslexics, and the teacher could also look at different kinds of formative assessment, explicit / direct instructional approaches as well as being more flexible in their own teaching.

I've attached some useful links and documents for everyone.

- <http://eltwell.com/dyslexia-assessment/spld-assessments-for-multilingual-people/>

Participant 19

Hello **Participant 26**. Thanks very much for the link. I thought it was a great page. and definitely the idea of using more kinaesthetic and multisensory activities definitely makes a lot of sense. I also agree with the idea of praising her for the good things she does is a very important factor to keep in mind.

Participant 9

Thanks for sharing the link **Participant 26**.

Participant 11

Dear **Participant 26**,

Thank you so much for your reply/ideas. I'm very much with you on the negative labeling there. My idea is that maybe that is the reason the teacher is not starting to think about how to help Zoe (not really anyway) but seems to be thinking about her more in terms of a problem than what he can do to change that. Zoe would shine if she could learn in more kinaesthetic/audiovisual ways and she could contribute so much to the class. And yes, it seems quite an oldfashioned and conversative approach with respect to the writing being extremely important to learning. I wonder how long it takes before teachers everywhere see that this idea isn't 100% true. Thanks for the link. I'll put it in my bookmarks and will look at it later.

Participant 13

I extremely agree with you since you have covered all Zoe's difficiencies in the classroom as well as some linguistic remedies or recommendations for the teacher being on charge.

I want to ask you a question: does Age matter much in such cases?

Moderator

You mentioned a possible external factor for some of Zoe's behaviours, **Participant 15**. A change in routine can trigger off unexpected reactions. When my son was 4, one day he came home from kindergarten blinking very often when he had to speak. His blinking got worse and worse although he is and already was at the time very self-confident. We went to see an ophthalmologist who kept asking us if we changed anything in his regular routine, if we moved house, changed kindergarten or any other change, even something that we might consider insignificant. He said that there were no physical reasons for his problem but he had seen it in many children who undergo changes in their lives. There was nothing we could think of. A few days later my son told me out of the blue that a few weeks before (we managed to pinpoint the moment to the very day when his blinking started) a classmate called him weird because he was able to read very well for his age. So his change was the fact that for the very first time someone he considered a friend offended him in a very personal and serious way. We talked to his teachers and they decided to dedicate a whole week to the accepting differences and the importance of words and labels. They started on Monday with therapeutic stories and when I picked my son from kindergarten that Monday, the problem was gone.

Personal experiences aside, it is true that when observing a learner's behaviour it is important to notice the frequency of the signs and to be aware of the larger context of the learnerr.

Participant 11

Wow...I had never imagined something like that could have such an impact. Thank you for sharing this with me. It is definitely something on my learning list right now and I will keep this mind when dealing with

students old and young. Glad school handled it so well and dedicated a whole week on accepting differences!

Participant 15

Something similar happened to my daughter resulting in my being unable to light my paraffin heater because she had developed a terrible fear of fire. I finally traced it to remarks made by one of her teachers, but the headmistress (a wonderful woman) chatted to her, and the fear evaporated. Thank you for sharing this with me.

Participant 11

Thank you so much for your remark! Especially the link to having just changed school which wouldn't have been something I would have triggered at. Thank you for giving me some extra valuable insight with that!

Participant 13

I think that the teacher should be more flexible about Zoe in a sense he shouldn't let things done by the parents. A teacher's role is to take care of all students and particularly those who need more attention. So there is a lack of misinterpretation of Zoe's real problems. I learnt that Dyslexia is called a specific learning difficulty thus the teacher is not sure about an effective teaching strategy to use in order to diagnose this difficulty.

The teacher should try a 'multi-sensory activities' in order to keep Zoe motivated and eager to write everything without feeling any compulsion.

Participant 15

I do think the age factor is important. The younger Zoe is, the more important it becomes to act in close collaboration with the parents, especially as the child is new to the school, so her parents know her better than her new teacher. Then in order to advise the teacher on how to adapt his teaching to be more inclusive, age is also important. Zoe's lack of progress in reading and writing is very noticeable, so it seems reasonable to assume that there are many activities that would be time consuming and inappropriate to spend a lot of time on in the context of an EFL lesson. On the other hand, with a little imagination and some help, the teacher should be able to find activities which would be suitable for all his class.

You are quite right of course, that Zoe be motivated and encouraged to participate actively in the activities of the whole class.

Participant 15

I have been reading more about dyslexia and measures recently put in place by different countries to help children with this condition to remain in main-stream schools. It occurred to me that the teacher possibly knows about dyslexia in theory, as he talks about Zoe's difficulties as though he may have read about it, but he may never have had to deal with a dyslexic child, so does not recognise the possibility when he sees it. Zoe obviously needs help and her teacher needs guidance so that she can benefit from the help she is entitled to.

What is your view on this, **Participant 19**? You have come up against an uncaring administration in the case of one child. Without the explicit support of your hierarchy, how far do you think you could go in helping the little girl in question without causing problems?

Participant 19

Hello **Participant 15**. I loved reading your post. Without the "explicit support of my hierarchy" (LOL) and to answer your invitation to dialogue, I will tell you that If I were to do something about Zoe, I would definitely start talking to her (without telling her I think she'd got dyslexia but giving her some tests on writing so during the feedback I would pay special attention to her explanations of her mistakes. Then I would talk again to the director and tell him it's better to talk to this girl's parents to try and find out the causes of her bad performance in school, specially on written work. Once in the meeting with her parents, I would tell them we have found out that despite being a very intelligent and participative girl, she seems to have some difficulties with her written work and this is affecting her studies and learning result, so I would recommend her parents to have a follow up along with her other teachers and I would tell them (in a very soft diplomatic way) that checking with some specialist would be a good idea to help her overcome her difficulties with studying.

In the meantime, I would definitely use the colors trick to teach her how to organise sentences and meaning and I would prepare some tests and activities specially designed for her so that more physical activities and games are included using colors, movements and sounds. I would also change my regular class plans and start introducing some activities that are more inclusive so to allow children with possible SEN to get a better learning output.

Participant 15

I find that flashcards are very helpful when dealing with SEN children in general, and especially those with reading and writing difficulties, as the flashcards can be used to provide a reason to speak. The manipulation of the cards adds a kinesthetic dimension to many tasks as well as the visual one.

Participant 33

Although the teacher recognises that Zoe is a clever and sociable child, he fails to understand the real reasons why she has the difficulties he mentions here. He blames the previous school for not paying much attention to writing skills.

It could be said that Zoe is a dyslexic learner because she shows difficulty in coping from the board (probably due to poor working memory), she struggles in putting her ideas in a logical order (sequencing weakness), she lacks self esteem ("I'm embarrassed", "I'm dreading that") but on the other hand, she can show creative thinking ("she joins in class discussion", "I have so many ideas"). She also enjoys games and acting (good kinaesthetic memory).

What **Participant 26** and **Participant 15** have already suggested here is some good advice to the teacher and I agree with them. I would say, too that it would be better for him to ask for professional help just to be sure that she is dyslexic (yes, labels again), before talking to parents, to Zoe and to her classmates. In the classroom, he could adopt a more holistic approach and as we see in the teaching strategies 3 in this module, he could emphasise the good points and that learners with dyslexia are often highly intelligent people. Talking to Zoe, he could explain the strengths and weaknesses of her brain as dyslexic, so that she can feel relieved and less stressed. This way, he can boost her self confidence and at the same time set a good example of inclusive behaviour to her peers.

Participant 3

Like Zoe, there are many learners who should be approached by various approaches to perform an efficient teaching and learning process. On the other hand, educators face the problem of class size because sometimes they may be large, and couldn't pay attention to the strengths and weaknesses of

individual student . His parents should be known about her condition clearly . Teachers should create a good rapport without making negative remarks to her.

Participant 20

I find that the teacher isn't even exploring the possibility that Zoe may have a learning difference. There are red flags everywhere yet, he doesn't mention discussing this with the director and Zoe's parents to request a proper evaluation. By identifying a student's needs, any teacher would be able to apply effective learning strategies. This teacher applies nothing to help her except keeping her after class and assigning extra reading. I don't understand why he would suggest more reading when she's, obviously, struggling in other areas. The teacher suspects this isn't making a difference and he's right.

Her inattentiveness could be corrected by moving her to the front row, just in front of him. Zoe's inability to hand work in on time could be helped with class reminders in the form of post-it notes or on the board, written in color (ex. Two days until assignment is due! Ask me if you need help budgeting your time). I, as a teacher, would give her extra time to complete her work. Zoe should be given information and tasks in small amounts because of her working memory issues. Using visuals along with words and phrases is really helpful, too.

Allowing Zoe to record the lesson on a phone would help her comprehension and memory. She could record her ideas for her writing, too. The more she is allowed to incorporate her auditory skills , the better. And she should be allowed to use spellcheck. Building her confidence is crucial to her success.

Moderator

Dear all,

You have all referred to some aspects you picked up from the quotes from Zoe and her teacher. I would like to repeat a recommendation I already made in my introductory video. When you come to a forum discussion, read the parent post (my initial post, which includes the task) and click on Reply immediately. Make your contribution and only after that should you start reading the others' posts. This way you make your contributions independently and you do not have the feeling that your post is redundant.

Keep your replies coming in!

Participant 15

Zoe's inability to transform the ideas she has in her head into a coherent written form could be helped by pair or group work. If she is allowed in the safety of a small group to put her ideas into words which would then be written down by another child working on the same project, and if necessary read out loud to the class by someone else, Zoe would have the enormous satisfaction of having participated in producing something she could not have done alone, and might even have the ultimate satisfaction of seeing her work on the wall!

Moderator

Dear all,

You have all identified the signs that indicate that Zoe is dyslexic. Let's take a look at the advice you have offered to Zoe's teacher so far:

- plan special activities for Zoe
- give her extra reading lessons
- get to know Zoe
- read more on dyslexia
- focus on speaking activities with her or allowing her to present her work orally
- insist on the good aspects of Zoe's work
- ask for help from specialists
- stop labelling Zoe and try to understand the root of her problems
- assess Zoe orally
- changing the teaching methods and the materials (multi-sensory activities)
- encourage peer/group work
- talk to Zoe, then to the school management and her parents, suggest specialist help
- change the seating arrangement, move Zoe closer to the teacher
- break down large task into manageable bits
- using technology to record lessons or Zoe's contributions and ideas

This is all great, practical advice. However, let's imagine you give the teacher this advice but the teacher rejects all of it. In fact he disagrees quite strongly. The teacher thinks the best approach is to 'wait and see' rather than intervene. How would you defend your combined position?

Participant 20

Give the teacher a deadline before contacting the director and parents. I would say 2 weeks would suffice. If the student is failing and disruptive, I think it's in the best interest of everyone involved to find the root of the issue. After that time period, I would have a meeting with the teacher, director, and parents to discuss how to help Zoe become a successful student.

All of the advice listed is really wonderful. I'm picking up ideas that I will definitely incorporate in my classes. I'm really happy to be a part of this!

Participant 3

Great!

Moderator

It is truly rewarding to read this, Elizabeth! Please share the results of these strategies with your learners.

Participant 15

Whatever the outcome of any professional intervention, it is quite obvious to me that Zoe needs remedial work in reading and writing. It is also evident that immediate steps should be taken as the more Zoe lags behind her classmates, the more difficult she will find it to catch up. As we all know, all our classes are to some extent "mixed-level" so it may be that the teacher can cater for some of the pupils at the lower end of his class when providing extra help for Zoe.

Having enlisted the help of Zoe's parents, he should invite them to a meeting to discuss the methods to use in order to help her. It is very important that anyone involved in her teaching should be using the same

methods, or the effect will be the opposite to what is wanted, and Zoe will end up feeling useless and resentful. Any other teachers having Zoe in their class should also be a part of this concerted effort. It is to be hoped that if Zoe's progress (or lack of progress) warrants it and Individual Education Plan (IEP) can be put in place for her.

He should begin with reading using the Orton-Gillingham approach, which teaches from the bottom up. Using phonics, the children learn the sounds which make up phonemes, and the letters which combine to make the sounds. Then they learn how syllables and words are made and so on until they learn that paragraphs make stories and reports. This is a method using phonics at the beginning. The memorisation of the words can be reinforced by the use of pictographs. This was very efficient with one of my dyslexic pupils whose mother taught him using this method. Then we must address the sight words which cannot be taught in this way. They are very important as they have a very high frequency count so they should be practised every day until learned. Here the use of pictographs can also be helpful. At the end of this post are some links to Youtube of video clips on the teaching of spelling and recognizing words. Multisensory activities help the memory, so combining the written word, its visual representation and a movement and/or music often helps. How many adults can remember primary school songs such as "Head, shoulders, knees and toes"?

There is also a link to a site which explains how to make reading mazes on-line. Many dyslexic children like tablets and computers, so learning how to write a maze on line may be a good way to link reading and writing in an interesting way, so appealing at the same time to the interests of a child (choice of story) and his strengths (IT skills).

We must not forget that many dyslexic children are also dysgraphic and have problems with the fine motor skills necessary for writing. The teacher should make sure that Zoe (and others) should hold her pencil correctly and sit up straight with her feet on the floor. She may find that a pen with a thick soft grip is much easier to use. She may have to do exercises drawing circles, lines and hooks, but it is better not to do this in class to avoid any derogatory comments by classmates. Apart from spelling and sentence structure which can be taught using colour coding, Zoe needs to learn how to organise her writing. This can be helped by teaching her mind mapping and sequencing, as verb tenses may cause problems later on.

The teacher needs to be aware of how he can use differentiation to make sure that all his pupils are participating in class. Dyslexic people find it hard to write and listen at the same time but dictation is often used in class. The stronger pupils could be given a gap-filling dictation where they must fill in the gap with the words they hear. The weaker pupils, including Zoe, can be given the text of the dictation but instead of a gap, they have to choose which one of two words is correct and circle it, thus eliminating the need to write.

The teacher should not forget that for Zoe to participate in

class and work demands a lot more effort than the other children, so she may at times be very tired and need to close her eyes for a few minutes. It may be that she needs to get up and move around. This requires tolerance on the part of the teacher and the class.

The teacher has been given a lot of practical advice as to how he can help Zoe. If pushed, I would indicate to the teacher that failure on his part to attempt to address Zoe's integration in the class, and especially her reading and writing, would amount to professional negligence, the ability to read and write is such an integral part of modern life.

<https://www.youtube.com/watch?v=-CpZAH6ellc>
spelling techniques with illustrations

<https://www.youtube.com/watch?v=70hoV-YYRkE> learn how to read and spell using phonics

<https://www.youtube.com/watch?v=rQDdN29tDHY> reading fluency

<https://edtech4beginners.com/2017/05/04/choose-your-own-adventure-stories-using-google-slides/>
reading mazes as
a step to wanting to write

May I apologise for the lack of references to the texts I have mentioned. I have been reading about dyslexia for some time now, and collected a number of texts, not knowing that one day I would need to know where they were from. Also, apologies for the length of my post!

Participant 7

This is a fantastic list of resources, and so well answered. Thank you for sharing this list with us!

Participant 19

Dear **Participant 15**. Thanks very much for the activities you mentioned. The Orton-Gillingham approach makes a lot of sense to me. Thanks as well for the links. There's so much to learn about this topic. The idea of using written words to be circled instead of a gap might work, but we must remember that one of the problems of dyslexia is recognition of written symbols and they have problems not only with writing but with reading.

Participant 15

This is only an example among many others of how to adapt a task to suit different levels. It is something a teacher will need to become proficient at if confronted with SEN pupils, or even a class of widely differing levels. I quite enjoy the intellectual challenge, but sometimes the effort required becomes quite overwhelming!

Participant 20

This is truly helpful! Thank you for sharing these ideas and resources!

Participant 9

Thank you **Participant 15** for the links!

Participant 11

Thank you for sharing. I will reread your comments later on and will bookmark the links. I'm learning so much here and I'm so glad about being here. Even though young learners are not usually my focusgroup I do work with some teenagers. And I also work with adults and they also have dyslexia sometimes. My feeling is that after this course I can help my students with SEN much better too, even though they are adults!

Participant 19

I would talk to the teacher again and try to persuade him/her to start doing something to help her as soon as possible. If he/she insists in waiting, then, I would recommend to ask other teachers for their opinion. This way, if this teacher realises other teachers think she needs help, he/she might react positively and start doing something about it. If nothing works, I would mention the topic in one of the weekly meetings to see what the others think or say about this.

Participant 33

{This is an answer to the second question of **Moderator** } I would then agree to his approach ' wait and see' but I'd ask him to wait for about 2 weeks or a month { depending his teaching hours with Zoe}. In the meantime I'd give him a kind of assessment report to fill during this agreed period.{ Or it could be as the one presented in " Understanding dyslexia - 5 " Unit 1, page 6.}In the meantime, I would talk and ask from the other teachers of Zoe to complete the same report during the same period. If the results were similar or if all of the teachers ticked more than 5 signs, then I'm sure he could be persuaded to look for the real cause of the problem and educate himself on how to help her.

Participant 9

The teacher can reject it but he should then put a list of action plans to observe the kids and make notes of it. He can wait but with some evidence and work should go with his rejection.

Participant 11

Well, I think I would give him the following quote (no idea who said it): If you do what you always did you will get what you always got. As in: 'wait and see' won't change a situation because it doesn't change anything in the situation. Even worse: the longer this situation continues the more Zoe might start disliking school which could mean all sorts of extra issues. Some of the above tips will take time but some of them don't take a lot of extra time/energy at all. Another approach might be asking the teacher when he had a difficult situation. Did he want to 'wait and see' or did he want action and help? Why would it be different for Zoe?

Participant 1

There should be set a timing or a deadline for the teacher to "wait and see". The timing in this case should not be long term but I would say no more than a couple of weeks. Time in which probably more evidence will come along. Parents definitely must be involved, and they will also have some observations that will confirm what has been observed in school.

All the listed signs are observations which have to have a background of support, because to intervene evidence and data will be very useful.

Participant 19

Dear **Participant 20**.

I think the use of technology (Recording audio on her phone to reinforce her lessons) is a very good idea to help her reviewing and I would also move her to the front row. However, the problem of her possible dyslexia has to be addressed and treated as reading and writing skills are very important in every aspect of life nowadays.

Participant 3

According to your idea, I remember the role of IT in language learning process , a big change . Is it suitable to create a new different learning society , blended learning ?

I would like to know your idea .

Participant 19

Hello **Participant 3**.

Absolutely! I believe blended education is the trend of the times. One can not ignore the benefits of ICT in learning. It's visual and audio interactive aids and the tools for synchronic and asynchronic communication are a great advantage that has to be used to help students with SEND by switching to collaborative social learning. Anyway reading and writing skills have to be reinforced.

Participant 30

Most of my students love to use technology, but some of them really hate it and they even refuse to play Kahoot.

Participant 20

Yes, I agree.

Participant 11

I like the idea of her being allowed to record things on her phone. this would probably be very helpful indeed. You can give her extra time with some tasks but I think some tasks probably would be better if they would be adjusted a bit. Her inability to hand in written work on time, for example, comes from her feeling of not being good enough in it, being stupid. So just giving her extra time might not do the trick. You first need to show understanding for her problem and you need to listen to her and find a way of working together to get the best out of her. Unfortunately it doesn't seem as if the teacher will come up with this so far...So yes, I agree that building her confidence is crucial to her success. I also think that it would help if the teacher would stop seeing her as a problem because probably Zoe feels this and that doesn't help her confidence a lot.

Participant 7

Hi

My understanding is that the teacher is unaware of dyslexia and cannot identify the symptoms Zoe exhibits.

From this module, I gather that the child has dyslexia but is not aware of her condition. Also, perhaps the parents were not aware of it either, nor did the school identify it when she began the school year with them. As the teacher states, she has changed schools, so this was definitely not diagnosed or recognised in the previous school as well.

The teacher would firstly need to understand the issues faced by the child. From my experience, a teacher who is unaware of learning difficulties and the child in question, both need the support of a special education team. The spl. educator would help the teacher and parents understand the problem, use alternative teaching models/exercises with the child and share them with the teacher. This in turn would help the teacher include special activities in his daily lessons for Zoe that would engage her suitably in class , as well as allow her to safely and confidently participate in lessons without feeling anxious or fearful.

Participant 20

I agree with you, **Participant 7**. I believe it's the teacher should incorporate exercises and strategies from a specialist. I don't think the weight of zoe's issues should be solely on the teacher.

Participant 17

I think that as Zoe is a new learner in their school the teacher should have asked her about her previous experience in learning English. Especially when he had noticed Zoe's problems with writing tasks. The teacher could have also talked with Zoe's parents about her strengths and weaknesses in learning.

It seems as if Zoe is a learner with dyslexia. She is intelligent but with some difficulties in fulfilling writing tasks. She may have problems with working memory, so the teacher should try different strategies to help her with her learning.

First of all, the teacher can try multy-sensory approach in their class-room. It is possible to use for Zoe individual word banks to learn new words instead of copying them from the bord, provide worksheets or summaries.

Also, Zoe said that she has a lot of ideas for stories but it is difficult to write them all down, so she may use her computer which has a spelling correction instead of just writing. It would be great if the teacher use BROGY to help Zoe organize her ideas and learn structure of English sentence.

Participant 30

Sorry for my late reply, but it is very hard for me to work during the week. The best time is Sunday evening. Anyway here is my contribution.

The teacher is underrating Zoe's problem and tries to solve it with extra work for the student who already lacks self-confidence as far as it concerns writing. It seems to me that the teacher is trying to put the burden on the student and the parents. Since Zoe feels confident on correcting other people while speaking, he should probably reinforce this positive aspect and make clear that she can perform better in writing if she practices more. The teacher should probably first of all try to find out what the problem is talking to the girl, her parents and involving the school in finding the reasons behind such failures.

In the meantime he should work on several approaches (probably a multisensory approach would suit well or even using some apps such as learningapp) in order to find the one the best fits Zoe's needs. H should probably give smaller writing tasks to her in order to make her concentrate on small bits, give her more opportunities to express herself orally, let Zoe work in pair or group to get some help form the other peers.

Participant 1

These weeks have also been difficult for me to get along with the course during week days!! For me it is the same, during the "weekends" I have more time to go into it read it properly and answer some replies!!

Feel comfortable to do so:)

I agree with your comment that the teacher should work on several approaches to find out which one fits better to Zoe's needs.

Participant 9

First of all, the teacher should have sat down with Zoe and talk to her about these issues rather than making guesses in his mind and get help from an in-school specialist.

In this module, I learnt that dyslexic people have a poor working memory which clearly shows that she struggles to take notes off the board. The problems with writing, spelling and reading all indicates that she might have got dyslexia. As Zoe says she is very comfortable with acting out scenes, correcting mistakes orally, singing songs and playing games, etc.. Zoe is fluent in oral language and has full off ideas.

If I were Zoe's teacher, I would praise her strengths; demonstrate how to do things explicitly as well as explaining verbally; use more visual materials and games; explain her situation to her classmates; allow her to use spellcheck; explain the whole class that generally good teaching strategies for dyslexic kids will be useful for them, too; apply multi-sensory approach using a range of visual, auditory, kinaesthetic and tactile teaching strategies; assess her written work with special guidelines.

Participant 15

I notice that many of us have been blithely recommending getting help from people outside the school, speech therapists and presumably child psychologists etc. Last night I tried to find how easy that is. I know that within the school system in my country, help is theoretically there, but you may never see it. The same with specialists within the health service. They exist and are overwhelmed with work so you have to wait a long time before you can get an appointment, if ever. Then in the private sector in the professional directories open to the public, I could only find about ten speech therapists to cover the whole of the country which has a population of over 11 million people, with a very high percentage of under 25 years old - nearly 40%. There is not one I could find in the region of my city with population of about 700,000. So unless people can afford to pay for private help and are prepared to travel, I fear that for the moment we must count on our teachers to do what they can to help. There are a number of very new associations who are beginning to raise consciousness as regards special needs children, but their resources are few.

Teachers have a very heavy workload here, and few of the technical resources we keep referring to. However, in the case of dyslexia, we as teachers are bound to come across several children (one in ten of the population) who are at a great disadvantage, so we should all try to learn what we can in order to do our share. We should collaborate with our colleagues and get help from parents and local people.

So we are asking a lot of this teacher if he should come from a place where help is not readily available. However, he is a teacher and should be prepared to do his best for all the children in his class, and not only the brightest ones.

Participant 30

It's the end of the school year in Italy and this forum is addressing a problem that has accompanied my colleagues and me since the beginning of the school. We have in our class, a fourth-year vocational school, a seventeen-year-old student who refuses to acknowledge publicly that he is dyslexic and he refuses to be helped and to be assigned simplified exercises, reading texts or tests. The Italian law is very clear about what teachers should do in such situations once the student has been diagnosed. The law says he can use any compensative tool such as calculators, dictionaries, notes: he can be given more time to complete a task, and other helps.

At the beginning of the school year, we realized that the certificate with the diagnosis dated back to when the student was in elementary school. The certificate stated that he had a serious form of dyslexia. We immediately realized that student had not had any positive development since then and that his situation might have been worsened with time since he is very introvert and quite isolated in the class. We immediately asked the mother to produce a new certificate in order to be able to address the student's problem in an appropriate way. It took her six months to get a new certificate and she handed it today. The certificate clearly states that situation has worsened since elementary school, the student is not able to perform for his age and moreover, he needs a psychological support as he refuses to accept the diagnosis.

As I said, it is the end of the school year (schools will close on 9th June) and we have been trying to help him over the months. He has not been able to produce anything valid in written form and every time we tried to hear from him a lesson of his choice and according to the schedule that he had established he refused. Most of us have tried many approaches without any results probably because we need to start from the scratch as he has never been really helped in the past. We probably should start doing things that are done at the elementary level, but since he refuses any help we are not able to help him and we probably lack the necessary competences.

I asked him to speak to a psychologist that comes regularly to school, but he did not do it. I don't know what do and my colleagues want to fail him, I am against it as I think that a failure would make him even more introverted and secluded. The colleagues seem to analyze only the school results without thinking of the psychological aspects involved.

I know that the situation is problematic but I would really appreciate any suggestion you could write me.

Participant 11

Dear **Participant 30**,

This sounds like a problem indeed. I suppose even teens can't get help if they don't want to. So probably the first step is getting to the bottom of why he refuses help? Very often it is fear/embarrassment. Is he afraid he will look stupid, that his peers will think he is not intelligent, what is his idea about people with dyslexia? Maybe he has an idea in his head of how people with dyslexia are and he doesn't want to be like that? I understand he might not want to talk with a psychologist because then you are (in his eyes) probably definitely crazy. Maybe all of this puts him too much in the 'problem' area and he feels uncomfortable there? I would say: have a teacher who he trusts and who seems more in him talk with him personally. Explain that being dyslexic is not a problem. Maybe come with a list of people (celebs) he knows who also have dyslexia. Explain to him that all the help is not there to embarrass him or make him feel less but it is to help him. Ask him why he doesn't want to accept this help. Tell him it is logical he is a bit scared about it all and finds it all a bit weird. Explain to him where he is at now and what happens if he

keeps on rejecting help. Also explain to him what could happen if he accepts help. Explain to him that accepting help is not a sign of weakness but a sign of strength and that having dyslexia does not mean you are stupid. Be there for him, listen to him. Only then can you slowly explain to him which help is handy, why it is handy, what it means for him and what he could get out of it.

Participant 15

The boy's mother might be able to bring some light to bear on this problem. Has something happened during his school career, or elsewhere, to bring this situation about? Would she be able to say or do anything to help, which is not always the case with parents.

As to allowing the boy to pass when he has not reached the required level, that is an enormous dilemma, and I really don't know how to advise you. I have a similar case of a primary school boy with (I suspect) autism. He is being home schooled in the French national distance learning programme. He has a tutor for all his subjects except English and I suspect that he has been getting enormous amounts of help to be able to have the required marks to carry on to the following year. I appreciate that the parents are happy to think that he is capable, and the child is more or less motivated because he sees results which are undeserved. I spoke to the parents and said that by French law he is entitled to some adjustments to his work, but only if his condition is diagnosed by a professional. They agreed to see to this, but today I understand that they are going to continue within the system without asking for any modifications or dispensations. In other words he will either have to do his year again (not for the first time) or he will go on to the next year because of the extra help he has been getting in his assessments, falsifying his grades. This will mean that he will in fact be able to understand less and less of what he is being taught instead of being given the chance to learn at a speed all he is able to comprehend, and learn it well. One day it will all catch up with them!

Since I am only working with the child as a private tutor, does that give me extra licence to pressure them do what I think is right? After all I have no axe to grind. It just saddens me to see this child left to his fate.

Sorry, I'm not being much help, except to let you know that you are not alone with your dilemma.

Participant 30

Thank you so much for your reply. We tried to talk to the students but he does not engage in a discussion, he just nods his head and does not say a word. This makes it very difficult. There is a colleague that the student admires particularly who tried to talk to him but with no success. I told him the names of many famous dyslexic people and told him to look on the internet and find out more about them, but he was not interested. We need to come up with something that can help him get out of the hole where he is hiding.

Participant 11

Problems with the approach: the teacher doesn't seem to understand there might be a problem and that Zoe doesn't play up just because. Unfortunately the teacher doesn't seem to be connecting the dots and checking whether there is a different issue behind all of the symptoms. Then the teacher would maybe be more open in trying a different approach which is not happening now.

What have I read in this module or elsewhere that helps me understand the situation: I have read that dyslexia is not just a problem with language but that it can affect other areas too, like planning and organising. However, I have also read that Zoe does have skills that now might not get utilized, such as seeing the bigger picture and being able to get along if other approaches are used.

Advice to the teacher: Start looking at the bigger picture, stop seeing Zoe/Zoe's writing as a problem. Properly talk with her and her parents as to what struggles she has at school and look into how you could help her already. Send her for a dyslexia test, but in the meantime LISTEN to her and find a way of working together to show what she can actually do!

Moderator

Congratulations on this fruitful discussion! You have done an amazing work studying Zoe's study case and recommending strategies for the teacher. Please find attached a summary of the discussion.

Participant 15

Sorry. Please can you tell me how to find the link for the summary

Participant 9

I guess, you forgot to attach the document...thanks!

Moderator

Dear all,

I did attach the PPT but did not realise the platform does not accept it. I suppose it is too large. Consequently, I uploaded it online and I am sharing the link. Sorry for the confusion.
<https://www.emaze.com/@AQZFOZLO/untitled>

Appendix 7 Example transcript (Group B: Module 2)

Module 2 - DYS - Unit 3 (GrB)

Hi all.

After having completed the 3 units of the Module Dyslexia, answer the following questions:

What are the problems you have faced when teaching dyslexic children in an English language class? (If you have never been in this situation, you can try to imagine what the problems might be)

Is there anything from this module's reading and activities (or other reading you have done) which would help you to deal with this problem in the future?

Participant 8

Moderator, I think in the collaborative tool module I have missed out on time and date for our webinar .and the real time online meeting .How can I schedule it. Can you guide me please

Participant 31

Hi **Participant 8**,

I don't understand what are you talking about

Could you tell me,please?

Participant 8

Participant 31 ,Thanks to **Moderator** she clarified my query and your confusion due to me. :-)

Moderator

Hi **Participant 8**

You might remember from my video presentation that I insisted on the fact that in this course we are going to focus on two activities: module completion and forum participation. We will not have live sessions and assignments except for the final assignment that will be communicated separate. We have plenty of opportunities to communicate in the forum, these are our asynchronous sessions. :-)

Participant 31

Hi **Moderator**,

Thanks a lot for your clarifications.I thought I had misunderstood some information or missed something.

Have a nice day!

Participant 8

Thank you **Moderator**, Yes I do remember the assignment bit and my apologies for missing the live session instruction. I was reviewing the objectives of each module and thought I missed out on that . Thanks for clarifying my doubt .

I have exams in the first week of June ,so I thought I must inform you about it in advance for I may not be able to participate actively during that duration,I am working regularly on the course and shall cover up soon after the exams.

I have to admit that I am enjoying this course immensely ,learning new things with excellent content and ideas that one finds practical and with the help of real life examples it all seems achievable.

Related to Dyslexia I have come across children who make spelling errors of the same kind ie inverted C's mix of b and d . They are good at oral work and seem to answer well,but when you see their written work you wonder why it does not match the the way they talk .

Recently I took a reading ability test of grade 2 children ,who are about 6 years old ,they could read words like strange ,dinosaurs etc ,but I wondered why most could not read the word SAW from the passage they had not read before.? Does anyone have an explanation for this ?

Participant 27

Hi **Moderator**. You mean we do not need to do the assignment at the end of each Module to be considered completed right? I have finished and submitted my assignment at the end of Module 1.

Participant 16

Hi!

For me i have not had these situations yet but i think this SEN sector will play a big role in the future in my country.Though i don't have such dyslexic students, i still remember some of my classmates back in my childhood.They always got into trouble for forgetting their books and for not writing!They might have got such dyslexic problems.

Moderator

Hi **Participant 16**.

It is estimated that 1 - 10% of the learners are affected by dyslexia. So statistically we all must have had dyslexic learners. Do your students never display any of the signs described in the module, like you said your former classmates did?

Participant 16

I think so.Some of my former classmates forgot their homework, always failed in their tests and they were labelled as lazy and spoilt.For teachers at my school, they were a disgrace and they were neglected, of course.Some even couldn't spell things right but teachers never wondered why.Instead,they judged that they had poor foundation in the subjects.That's the most common judgement,in my view.

Participant 22

Dear **Participant 16**,

Indeed, it is very sad that teachers thought they were lazy and neglected them. Frankly, if I didn't know about dyslexia I would also think that these students were lazy.

Participant 16

Me too! Though i don't have any dyslexic students,i'm really willing to help them.As i'm a language teacher for both young and adults,these are what i should know.

Participant 12

Some problems that I have faced when teaching children with dyslexia English are:

Problems corresponding correct sound to letter

Problems corresponding correct letter to sound

Blending

Sounding out words

Writing

Following directions

My own child has dyslexia so I have done a lot of reading to find ways to help him during his schooling. This knowledge then transfers to help my students. I have used playdoh to make letters or words copying a visual of letter/word while saying letter name/sound/word. Singing or clapping/jumping/stomping spelling words. Playing games with directions eg Simon Says

Participant 4

Hello, **Participant 12**! Could you explain what "playdoh" is?

Participant 8

Participant 4 , playdough is coloured clay that children can play safely with and form it the way they like in different shapes or letters

Participant 4

Thank you very much for the explanation, **Participant 8**! I have never come across this before :).

Participant 31

Hi **Participant 12**

I'd like to share TED talk I've just found through a newspaper article on dyslexia :

"New solutions for dyslexia: Luz Rello" , at TEDxMadrid (in Spanish with English subtitles)

<https://www.youtube.com/watch?v=P1dRqpRi4cs>

The article is in Spanish, in case you can understand it :

"Luz Rello, investigadora: "Hay que salir del armario de la dislexia"

http://elpaissemanal.elpais.com/documentos/luz-relo-dislexia/?id_externo_rsoc=FB_CM

And the site mentioned on both links :

"Change Dyslexia"

<https://changedyslexia.org/>

The video is very inspirational.I hope it can be useful for you .

Moderator

Thanks for the resources, **Participant 31**! If anyone else has found good articles on this topic, feel free to share them here.

Participant 31

Dear Colleagues,

I've just come across a project on a social media that I think could help not only dyslexic learners but teachers as well, when planning inclusive activities for their lessons. It's called Vocabulary Maps Workbook and the idea combines presenting new vocabulary in a context, through mind maps .

<https://www.kickstarter.com/projects/947034083/vocabulary-maps-workbook>

This might give us an idea of how we could work in our classes, adapting our practice to visual learners.

I hope you all find this as inspiring as I've found.

Participant 22

Dear **Participant 31**

Thank you for the link ver much! It reminds me of picture dictionaries.

Indeed, vocabulary maps are good way of learning a language for all language learners.

Participant 8

Participant 31, thanks for sharing the wonderful site on vocabulary -maps, specially love the one on eggs and idioms related to it .

Participant 31

Hi,

I'd like to share this very impressive concrete visualisation on a site page with a dyslexic simulator :

This is what reading is like when you have dyslexia. And as a dyslexic, I know.

<http://www.waldorftoday.com/2016/05/this-is-what-reading-is-like-when-you-have-dyslexia-and-as-a-dyslexic-i-know/>

Full article :

<http://www.revelist.com/wellness/reading-with-dyslexia/807>

Participant 22

Thanks for sharing the links, **Participant 31**! I felt like being in the world of dyslexia and I now understand them better.

Participant 14

That's amazing! I've always wondered what it actually felt like ever since I met someone with dyslexia many years ago. Now I feel as though I have a much better idea. Thanks for sharing that.

Participant 12

thanks. Will go and look at it later tonight. Thanks for the links.

Participant 12

thanks for the link **Participant 31**

Participant 8

Rainbow writing also works well . the teacher writes the letter b in one colour ,big and bold and the child is asked to write around it in seven different colours ,reinforcing the formation in an interesting pattern .

Participant 31

Hi **Participant 8**

Just found this resource,

"iPad Apps for Dyslexia/Reading Writing Support"

<https://atss.wordpress.com/2013/11/09/ipad-apps-for-dyslexiareading-writing-support/>

Participant 22

Dear **Participant 12**

I see you have done a lot of research on helping students with dyslexia. I also do research on deacease that my sister has and trying to help her with learning English. It's a nice way of making letters and words.

Participant 2

We have something in common **Participant 12**, it seems that facing the problem as mothers helps us as teachers.

Participant 12

Yes **Participant 2**. I think that I use a lot of my experience as a mum (my boys are now 20 and 15) in my teaching students.

Participant 4

Hello! I suspect I have such students in each class. But I can't be sure as parents are usually reluctant to admit these problems or consult with the specialist. (They prefer pretending that they have an ordinary child or blame teachers for the child's difficulties). What I can notice - a lot of my students reverse letters or missed them, some students can't often recognise the same word, no matter how long they have been familiar with it. Some student can't make a correct sentence (both, in English and language 1) and they have difficulties to tell a simple story.

What I can pick up from the module? I'm really glad to learn about BROGY technique. I think it will help a lot.

Participant 31

Hi **Participant 4**

Unfortunately, this happens in my country too. Parents hardly ever accept, even worse, they pay so little attention to their kids that they don't notice their kids might be having any kind of difficulty or problem at school.

Participant 8

BROGY technique is wonderful **Participant 4** I too feel the same .

Participant 31

Hi Moderator

Officially

speaking I have never had any dyslexic students in my groups so far. However, I can easily recognize just by a simple class observation that I've been having students with working memory problems (copying from the board, remembering a list of instructions and following directions).

This is not

the first time I have contact with dyslexia readings; however, the practical readings and activities from this module have been very helpful and important to make things more clear to me.

The good

and surprising fact is that although it is the first time I see the word "brogly" I have been using this strategy since I started teaching. This is so because when I was in secondary school I used to have grammar explanations of sentence structure for analysis in this way, the teacher used to use "codes" to make us understand syntactic analysis by creating mind map charts on the board. When I started teaching, the school did not provide me any instruction or training and I had young learners groups, so I decided to adapt this idea to colourful slips of paper, each representing a different part of speech, looking like a sentence formation game.

I also

leave things on the board, simplify instructions and explanations and use short commands and directions whenever I feel a student is having some "silent" difficulty.

But we have

to take into consideration I teach small groups, I don't know if would be able to do so in a large one.

Participant 4

Hi, everyone! I would like to share this link, I've found on Facebook. I believe this strategy will be very helpful with students who reverse letters b and d <http://www.rlacortongillingham.com/multisensory-monday-b-d-letter-reversals/#sthash.livLeG5i.TojyIBWp.dpbs>

Moderator

Dear all,

You have all referred to some aspects of your teaching experience or the research you have done on the topic of dyslexia. I would like to repeat a recommendation I already made in my introductory video. When you come to a forum discussion, read the parent post (my initial post, which includes the task) and click on Reply immediately. Make your contribution and only after that should you start reading the others' posts. This way you make your contributions independently and you do not have the feeling that your post is redundant.

Keep your replies coming in!

Participant 31
Hi **Participant 4**

Thanks for the idea, simple and practical.

By having a look at the site I've found this too :

"DIY Tactile Trays"

<http://www.rlacortongillingham.com/multisensory-monday-diy-tactile-trays/#sthash.BtGWfm5k.dpbs>

Also nice to use with any kids.

Participant 14

Hi, I enjoyed the units on dyslexia. I have helped a young learner with dyslexia in their L1, I have no experience of teaching English to students with dyslexia though. I found this website has some great resources that I would consider using. <http://www.dyslexia-international.org/ready-to-use-materials/>. I'm looking forward to reading what other people have had to say about teaching English to children with dyslexia!

Participant 31
Hi **Participant 14**,

Thank you so much for sharing this resource with us. It looks really helpful and full of ideas ready to be used.

Moderator
Hi **Participant 14**.

It would be very interesting to all of us to find out what strategies you used to support the dyslexic learner you mentioned. Thanks for the resource, it is really useful in terms of specific materials.

Participant 12
thanks for the resource **Participant 14**.

Participant 25
Hi,
I work a lot with private students and hosting small courses. These days, I have more and more students that have dyslexia. I have a 4th grader who writes sentences without leaving spaces between the words. She says for her it is just one big long word. It was only later that I discovered she was dyslexic

I also have an 8th grader who is taking the KET this year - he is the only student that has dyslexia taking the test. In his grade alone there are about 7 students, but all of them that I have come across have a very low level of English. At the school they encourage the students to make charts to make questions and sentences, but I don't see it being very effective. I have a feeling hearing with visual effects and speaking the language is more effective. Unfortunately when I do work in the schools they always tell me at the last minute who is dyslexic.

I am really enjoying this unit because ideally I would like to work more with students who having learning disabilities, especially dyslexia to help them learn English.

Moderator

Hi everyone.

As we are discussing research, it would be also interesting to look into other factors that might have an impact on dyslexia. The materials in our units showed that the connection between sugar and dyslexia has not been proven. However, scientists are now investigating if some other nutrients might have a positive effect on this disorder. You can find out more in this article:

<http://www.mayoclinic.org/drugs-supplements/omega-3-fatty-acids-fish-oil-alpha-linolenic-acid/evidence/hrb-20059372>

Have you found any resources on other factors outside that could help dyslexic learenrs?

Participant 27

Dyslexia is really interesting to me. This is the first time I've ever seen of this word and I am happy to have chance to understand it. My small class of five 5-year-old learners has one pupil who I think has dyslexia. I did not know about it before so I could not understand why he always made mistake of the two sound /f/ and /p/ or he often pronounced /'fækəli/ instead of /'fæmili/, and some other sounds. Although I tried my best to fix for him, he just can pronounced correctly at that time. After that, he forgot again. Sometimes I just crossed my hands and accepted the situation. At the moment I let them have some time off for summer vacation. So I'll try to apply some strategies learned from this course for him later. Actually, now I am not sure which strategy would be suitable for him. I would study more to decide.

Participant 22

Dear **Moderator**,

I think the challenge would be adapting the lesson plans to dyslexic children. As dyslexia-friendly teaching is learner-friendly teaching it would help other children as well and make me develop as a teacher.

I liked the BROGY very much. It would help me a lot.

Participant 2

My first encounter with dyslexia happened six years ago when my 18 years old son looked at me and told me: Mom, I'm dyslexic. I was in shock, my answer didn't last: Why do you know that? He had entered to a website, a good one, from the US, he was tested and he got the answers to his struggle. He was diagnosed as a dyslexic young man. I wasn't really happy and took him with a specialist in educational needs and a psychologist, who applied him new tests, and the

results were exactly the same. What a surprise! Well, during all his school life he was told he was slow and lazy, but no one including myself, did anything to figure out what was going on. I just helped him as much as I could thinking that he was just too spoiled and shy, however I never imagined what his real issues were. He graduated from high school with regular grades, but he succeed. After that he had to go to college and the struggle came back again... I'm not good at anything and I don't want to go to college". After two not very stable years, he enrolled College, in the School of Music, and he will finally finish his career this year and with honors. Happy ending! But my experience, then, helped me to teach my students, with a very eclectic approach in where visuals, audio and hands on activities are the main dish. I cannot diagnose students with difficulties, but by using a very colorful, noisy (allowed in our latinamerican culture :)) and DIY activities I'm sure I can reach the majority of them. One of the many things I will definitely use in my classes is the Multi-sensory approach. It will be an effective tool to engage my EFL students without discriminating any of them and a way to provide them with meaningful strategies that will allow them to acquire knowledge easily and faster than never before.

Participant 27

Wow it's a great story about your son. I wonder if you can provide me with the website to take the test. After this module, I'm thinking if I also have dyslexia because I feel hard to concentrate on reading, too. And reading out loudly helps me to understand better than in silence.

Moderator

Dear all,

I congratulate you on this very fruitful discussion. I gathered some of your ideas in a mind map. Please check the extra resources for more ideas on dealing with dyslexic learners and also save the resources posted by our colleagues in this discussion.

<https://mm.tt/884684616?t=FYAmZYLba4>

Participant 10

after enroled in new school this year, some students refer to one student by their fingers saying teacer: dont ask this student or makes him participate in any activity , he is lazy.

said the other students , so i knew that he is SEN student. a=the activities provided modules help alot to makes him more interested and push other students to take one step back over him .

Participant 25

I am lucky to say that I am able to work in small groups with most of my dyslexic students.

I always get nervous when I ask them to read out loud. I have found when teenagers are not so interested in 'making conversation' that best way to get them to 'speak' the language is to have them read out loud. We read slowly...and not a lot but we read. I also do a lot of listening so that they can hear new words rather than reading them all the time.

With Young kids a practice more listening and speaking.... rather than reading and writing!

Appendix 8 Inter-rating coding (initial agreement/final negotiation)

Group	Module	Coded Posts	Initial agree	Final agree	% Initial	% Final	Group initial %	Group final %	Total initial %	Total final %
A	1	54	44	54	81.48148148	100				
A	2	46	41	45	89.13043478	97.82608696				
A	3	65	62	64	95.38461538	98.46153846				
A	4	57	54	57	94.73684211	100				
A	5	46	44	45	95.65217391	97.82608696				
A	6	40	36	40	90	100				
A	7	56	52	55	92.85714286	98.21428571				
A	8	48	44	48	91.66666667	100				
A	9	35	35	35	100	100				
A	10	45	42	45	93.33333333	100				
A	11	70	69	70	98.57142857	100				
A		562	523	558			93.06049822	99.28825623		
B	1	38	34	38	89.47368421	100				
B	2	35	35	35	100	100				
B	3	37	29	37	78.37837838	100				
B	4	31	23	31	74.19354839	100				
B	5	28	25	28	89.28571429	100				
B	6	27	23	27	85.18518519	100				
B	7	22	16	22	72.72727273	100				
B	8	21	19	21	90.47619048	100				
B	9	31	28	31	90.32258065	100				
B	10	15	15	15	100	100				
B	11	31	27	31	87.09677419	100				
B		316	274	316			86.70886076	100		
		878	797	874					90.77448747	99.54441913

Appendix 9 Task/prompt coding

Exp = Exploration Int = Integration Res = Resolution
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Table 1 : Group A

Debate 1	<p><i>To back up your arguments please draw on the course content, other content you may find on the web, and your own personal experience (Int)</i></p> <p><i>In what ways, if any, were your existing assumptions challenged or changed by the debate? (Res)</i></p>
Case Study 1	<p>Can you identify any problems with this teacher's approach to the situation? (Exp) (Information share 1) Is there anything that you've read in this module (or elsewhere) that helps you understand the situation? (Exp) (Information share 2) What advice would you give to Zoe's teacher? (Int)</p> <p>Zoe's teacher does not agree with your advice (he was quite angry!). Can you justify your position based on a real example from your own experience, or other sources? (Res)</p>
PIM 1 (Part 1)	<p>Do you have any personal experience of ADHD (in a classroom or outside of it)? (Exp) (Personal narration - learner 1) If you don't, can you find anything on the web and summarise to share with others? (Exp) (Information share 2) What problems did ADHD seem to cause? (Exp) (Information share 3)</p>
PIM 1 (Part 2)	<p>Look at the previous discussion to question 1. Are there any problems that you can come up with a solution for? (Int)</p>
PIM 1 (Part 3)	<p>Look at all of the problems and potential solutions and summarise what you have taken from this discussion. (Res)</p>
Debate 2	<p>Debate the following motion.</p> <p>Learners with dyspraxia should not participate in team games. They can practice individual skills on the side lines. (Int)</p> <p>Who has won the debate? Why? (Res)</p> <p>What have you gained after this debate? (Res)</p>
Case Study 2	<p>What are the problems with the teacher's attitude to her new learner? (Exp) (Opinion 1) What problems may Zeki experience (Exp) (Information share 4) and what are the potential solutions for these problems? (Int)</p> <p>In order to conclude our discussion, I invite to reflect on what you learnt in this Module on VHP and on this discussion. Has exploring this study case changed any of your previous assumptions about teaching a learner with a visual impairment? (Res)</p>
Module 6	<p>Have you taken into consideration Bloom's taxonomy when designing a lesson plan? (Exp) (Personal narration - classroom practice 1) Think about a lesson you are going to teach and show how you would adapt activities in order encourage high order thinking skills. (Int)</p>
Module 7	<p>What problems do learners with SEN have with assessment of learning? (Exp) (Information share 5) What are the potential problems with introducing assessment for learning? (Exp) (Information share 6) If you are teaching a class, experiment with an assessment approach this week and then report back to the group on how it went. If you are not currently teaching you can read others contributions and summarize the groups findings.</p>

Case Study 3	Read the attached case study and comment on the following: What are the main problems that you see here? (Exp) (Information share 7) How would you approach the situation? (Int) As we have only two days left for this discussion, please summarise what you have got from this module and from this discussion. (Res)
Module 9	Share your experiences of teaching a child with behavioural problems. (Exp) (Personal narration - learner 3) What types of behavior did the learner show in class? (Exp) (Personal narration - learner 4) How did you cope with this? What strategies did you use? Did the learner's behaviour improve? (Int)
Debate 3	"It should be every teacher's responsibility to identify those with speech language and communication issues to allow for early intervention. All teachers should be held accountable for this duty." You can draw on your own experience with this issue or wider reading (Int) ...Under the circumstances, which side has won the debate? What are you taking away from this module and from this discussion? (Res)
PIM 3 (Part 1)	Do you have multicultural or multilingual students in your classes? (Exp) (Personal narration - learner 5) Do they have any specific characteristics? (Exp) (Personal narration - learner 6) What kind of activities do you do in your classes to allow for and help multicultural/multilingual students? (Int)
PIM 3 (Part 2)	Can you summarise if and how your beliefs have changed as a result of this module and the entire course? (Res)

Table 2 : Group B

Module	Task/questions
Module 1	How are your learners different? (Exp) (Personal narration - learner 1) How are they the same? (Personal narration - learner 2) (Exp) Mention some of your classroom practices meant to make sure you do not exclude any learners. (Exp) (Personal narration - classroom practice 1)
Module 2	What are the problems you have faced when teaching dyslexic children in an English language class? (Exp) (Personal narration - classroom practice 2) (If you have never been in this situation, you can try to imagine what the problems might be) (Exp) Is there anything from this module's reading and activities (or other reading you have done) which would help you to deal with this problem in the future? (Int)
Module 3	Do you have any students you think have ADHD? (Exp) (Personal narration - learner 3) What is your experience with these learners? (Exp) (Personal narration - learner 4) How do they behave? (Exp) (Personal narration - learner 5) What type was (s)he - PIT, HIT or CT? (Exp) (Personal narration - learner 6) Watch this video: https://www.youtube.com/watch?v=Dd62-eLJYI Are there any strategies in the module or in the video you haven't tried yet but you could implement in your teaching? Why/why not? (Int)
Module 4	Watch this video and make a list here of the dyspraxia issues (physical/motor, learning or social issues) presented by the specialist. Do you have learners presenting these issues? (Exp) (Personal narration - learner 7) If you do, what strategies would help them? (Int)
Module 5	If you have experience of teaching a child with a visual, hearing or physical impairment share your experience. (Exp) (Personal narration - learner 8) If you haven't got any experience find a useful resource and share the information about it on the forum (Exp) (Information share 1).

Module 6	Have you taken into consideration Bloom's taxonomy when designing a lesson plan? (Exp) (Personal narration - classroom practice 3) Think about a lesson you are going to teach and show how you would adapt activities in order encourage high order thinking skills.(Int) Do you have any tips for working with gifted and talented children? (Exp) Personal narration - classroom practice 4) How do you manage both the advantages and the challenges of having such learners in your classes? (Int)
Module 7	Which approach to assessment is usually used in your school – summative assessment or formative assessment? (Exp) (Information share 2)Which do you prefer? (Exp) (Opinion 1) What strategies do you use to assess your learners with SENs? (Exp) (Personal narration - classroom practice 5) Have you encountered any problems in this area? (Exp) (Personal narration - classroom practice 6) What were the solutions? (Int)
Module 8	Do you have any questions or comments about autism spectrum disorders? (Exp) (Information share 4) Do you have any students in your class who are, or might be, on the spectrum? (Exp) (Personal narration - learner 9) If so, what symptoms do they show? (Exp) (Personal narration - learner 10) What ideas from the unit do you think will be most helpful? (Int)
Module 9	Share your experiences of teaching a child with behavioural problems. (Exp) (Personal narration - learner 11) What types of behavior did the learner show in class? (Exp) (Personal narration - learner 12) How did you cope with this? What strategies did you use? Did the learner's behaviour improve? (Int)
Module 10	In Unit 1 you looked at types of provision for learners with speech and language difficulties. Find out more about the provisions for learners with such difficulties in your country (Exp) (Information share 5) . For example, is there a checklist that can be referred to? (Exp) (Information share 6) Share your findings and any experience you have of teaching learners with speech and language difficulties. (Exp) (Personal narration - learner 13)
Module 11 (PIM task) Part 1	Do you have multicultural or multilingual students in your classes? (Exp) (Personal narration - learner 14) Do they have any specific characteristics? (Exp) (Personal narration - learner 15) What kind of activities do you do in you classes to allow for and help multicultural/multilingual students? (Int)
Module 11 (PIM task) Part 2	Can you summarise if and how your beliefs have changed as a result of this module and the entire course? (Res)

Table 3 : CP Exploration : sub-element incidence

Sub element	Group A	Group B
Personal narration (total)	7	21
Learner	6	15
Classroom practice	1	6
Opinion	1	1
Information share	7	6
Total identified	15	28

Appendix 10 Findings : Code incidence and word count

Table 5.4 : Word count of cognitive phase in Group A and Group B

CP Exploration	34219	24126
CP Integration	40364	7620
CP Resolution	9856	441
CP Triggering	881	166
Accum. Wordcount	85320	32353
CP Exploration	40.11%	74.57%
CP Integration	47.31%	23.55%
CP Resolution	11.55%	1.36%
CP Triggering	1.03%	0.51%

Table 5.5 : Exploration sub elements for Group A and Group B

	Group A Coded Segments	Group B Coded Segments	Group A Number words	Group B Number words
Exploration Agreement	34.00	10.00	886.00	251.00
Exploration Divergence	0.00	0.00	0.00	0.00
Exploration Information sharing	45.00	38.00	5,192.00	1,928.00
Exploration Leap to conclusion	1.00	0.00	41.00	0.00
Exploration Opinion	107.00	78.00	5,880.00	3,113.00
Exploration Personal narration	119.00	163.00	22,866.00	18,794.00
Total	306.00	289.00	34,865.00	24,086.00
Exploration Agreement	11.11%	3.46%	2.54%	1.04%
Exploration Divergence	0.00%	0.00%	0.00%	0.00%
Exploration Information sharing	14.71%	13.15%	14.89%	8.00%
Exploration Leap to conclusion	0.33%	0.00%	0.12%	0.00%
Exploration Opinion	34.97%	26.99%	16.87%	12.92%
Exploration Personal narration	38.89%	56.40%	65.58%	78.03%

Table 5.6 : Personal narration code frequency and total word count for Group A and Group B

	Group A	Group B
Exploration Personal narration : Code frequency	119	163
TOTAL (all code frequency):	680	346
Exploration Personal narration Code incidence %	17.50%	47.11%
Exploration Personal narration : Code word count	22866	18794
TOTAL (all code word count):	85320	32353
Exploration Personal narration (word count %)	26.80%	58.09%

Table 5.7 : Integration sub elements for Group A and Group B

	Group A Coded Segments	Group B Coded Segments	Group A Number words	Group B Number words
Integration Building on	128.00	41.00	14,439.00	4,790.00
Integration Creating solution	74.00	15.00	13,490.00	1,389.00
Integration Justified hypothesis	44.00	7.00	6,535.00	1,050.00
Integration Supported agreement	38.00	4.00	3,307.00	213.00
Integration Supported divergence	22.00	3.00	2,690.00	244.00
TOTALS:	306.00	70.00	40,461.00	7,686.00
Integration Building on	41.83%	58.57%	35.69%	62.32%
Integration Creating solution	24.18%	21.43%	33.34%	18.07%
Integration Justified hypothesis	14.38%	10.00%	16.15%	13.66%
Integration Supported agreement	12.42%	5.71%	8.17%	2.77%
Integration Supported divergence	7.19%	4.29%	6.65%	3.17%

Table 5.8 : Resolution sub elements for Group A and Group B

	Group A Coded Segments	Group B Coded Segments	Group A Number words	Group B Number words
Resolution Appy, test, defend	13.00	0.00	2,288.00	0.00
Resolution Thought experiment	2.00	0.00	115.00	0.00
Resolution Wrap up	47.00	2.00	7,453.00	441.00
TOTALS:	62.00	2.00	9,856.00	441.00
Resolution Appy, test, defend	20.97%	0.00%	23.21%	0.00%
Resolution Thought experiment	3.23%	0.00%	1.17%	0.00%
Resolution Wrap up	75.81%	100.00%	75.62%	100.00%

Table 5.11 : Cognitive phase by task type

	Case Study	Debate	Open Discussion	Practical Inquiry Model	Group B
	Module 2,5,8	Module 1,4,10	Module 6,7,9	Module 3,11	Modules 1-10
CP Exploration	75	51	86	85	247
CP Integration	80	92	72	53	59
CP Resolution	14	31	6	11	0
CP Triggering	6	6	6	6	8
TOTALS:	175	180	170	155	314
CP Exploration	42.86%	28.33%	50.59%	54.84%	78.66%
CP Integration	45.71%	51.11%	42.35%	34.19%	18.79%
CP Resolution	8.00%	17.22%	3.53%	7.10%	0.00%
CP Triggering	3.43%	3.33%	3.53%	3.87%	2.55%

Table 5.12: Cognitive phase sub element by task type

	Case Study	Debate	Open Discussion	Practical Inquiry Model	Group B
	Module 2,5,8	Module 1,4,10	Module 6,7,9	Module 3,11	Modules 1-10
Exploration Agreement	4.05%	7.82%	2.38%	5.84%	2.74%
Exploration Divergence	0.00%	0.00%	0.00%	0.00%	0.00%
Exploration Information sharing	10.40%	4.47%	7.74%	3.90%	11.55%
Exploration Leap to conclusion	0.00%	0.56%	0.00%	0.00%	0.00%
Exploration Opinion	18.50%	8.38%	16.67%	20.78%	22.19%
Exploration Personal narration	10.98%	7.82%	26.19%	27.27%	45.29%
Integration Building on	11.56%	24.58%	20.83%	18.83%	9.42%
Integration Creating solution		3.35%	7.14%	5.19%	4.56%
Integration Justified hypothesis	4.62%	8.94%	9.52%	2.60%	2..13%
Integration Supported agreement	1.73%	7.26%	5.95%	7.79%	1.22%
Integration Supported divergence	2.31%	9.50%	0.00%	0.65%	0.91%
Resolution Appy, test, defend	2.89%	2.23%	1.79%	0.65%	0.00%
Resolution Thought experiment	0.00%	1.12%	0.00%	0.00%	0.00%
Resolution Wrap up	5.20%	13.97%	1.79%	6.49%	0.00%

Table 5.13: Cognitive phase sub element by task type (% word count)

	Case Study	Debate	Open Discussion	Practical Inquiry Model	Group B 1-10
Total	22951	22548	20176	19507	28771
Module mean	7,650.33	7516	6,725.33	9753.5	2877.1
Exploration Agreement	0.61%	1.30%	0.69%	1.61%	0.72%

Exploration Divergence	0.00%	0.00%	0.00%	0.00%	0.00%
Exploration Information sharing	5.90%	4.41%	7.57%	6.74%	6.70%
Exploration Leap to conclusion	0.00%	0.18%	0.00%	0.00%	0.00%
Exploration Opinion	9.16%	4.81%	5.18%	8.45%	10.20%
Exploration Personal narration	12.77%	9.73%	43.27%	46.19%	58.08%
Integration Building on	12.18%	25.63%	17.22%	12.25%	14.23%
Integration Creating solution	42.84%	3.64%	9.17%	5.05%	4.83%
Integration Justified hypothesis	3.17%	13.61%	10.10%	3.60%	3.65%
Integration Supported agreement	1.66%	5.22%	3.47%	5.37%	0.74%
Integration Supported divergence	1.22%	10.35%	0.00%	0.40%	0.85%
Resolution Appy, test, defend	3.54%	4.74%	1.38%	0.66%	0.00%
Resolution Thought experiment	0.00%	0.51%	0.00%	0.00%	0.00%
Resolution Wrap up	6.95%	15.86%	1.95%	9.68%	0.00%